

BUSINESS WEEK

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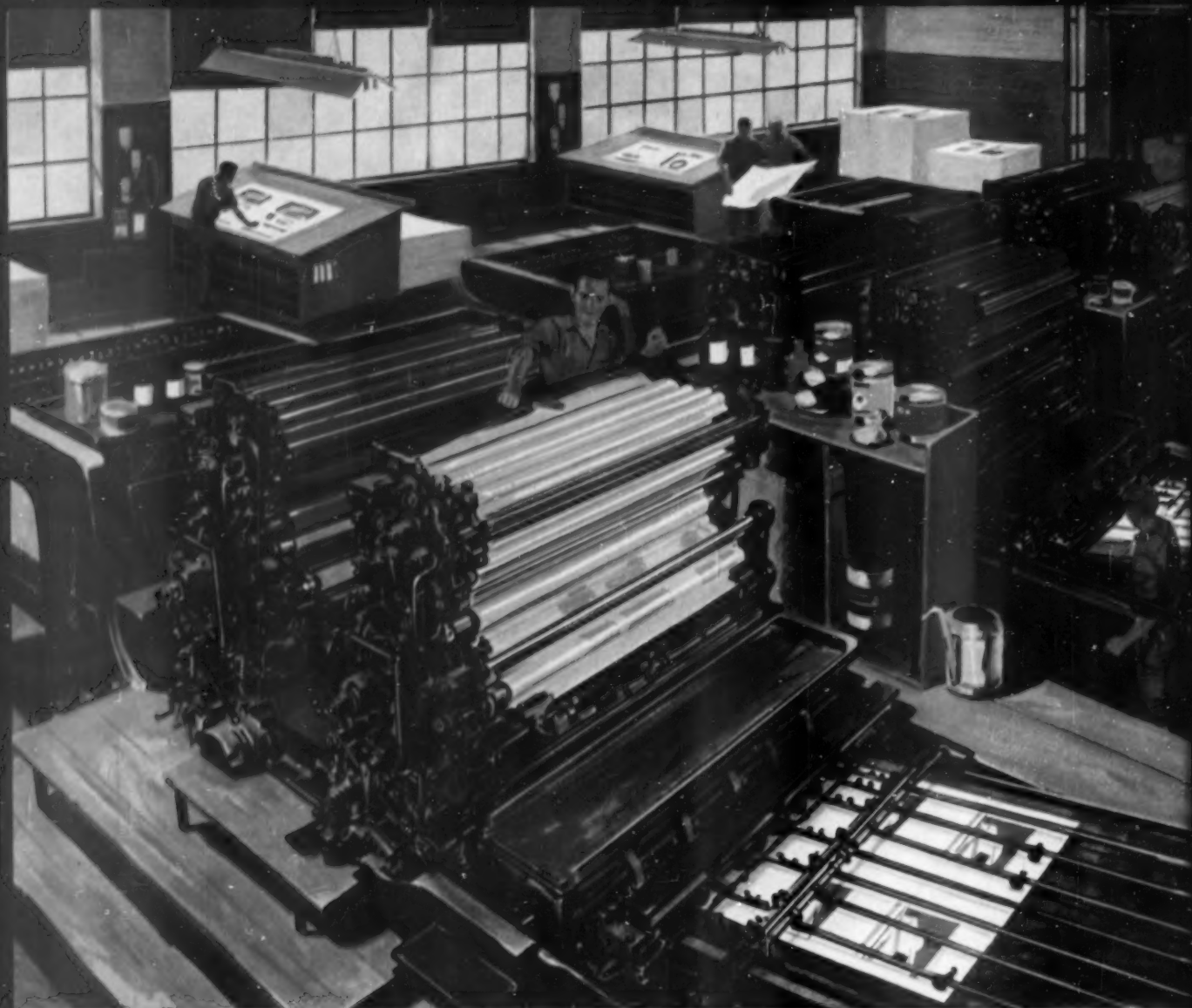


NICB's Williams: In an age of propaganda, the facts (page 51)

A MCGRAW HILL PUBLICATION

MAY 21, 1955

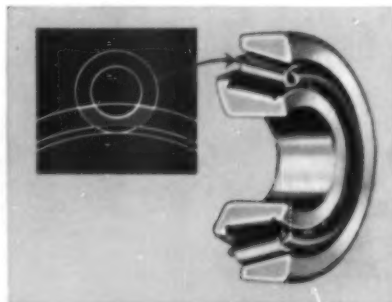
E B POWER
UNIVERSITY MICROFILMS
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ANN ARBOR MICH 48106



Rolling day and night...in perfect register!

You don't run a printing press by the clock—you run it by the job! And the hundreds of bearings in these high-speed machines have to stand this back-breaking pace days on end—while keeping the rollers in perfect alignment. ☆ Dependable Bower Roller Bearings, known throughout industry for their high quality and exact engineering, are doing an outstanding job where durability and precision are of utmost importance. That's because Bower-developed design features—like those shown at right—are making bearings last longer and perform better. ☆ Whatever your product, if it uses tapered, straight or journal roller bearings, specify Bower. They're used now in virtually every field of transportation and industry.

BOWER ROLLER BEARING COMPANY ■ DETROIT 14, MICHIGAN



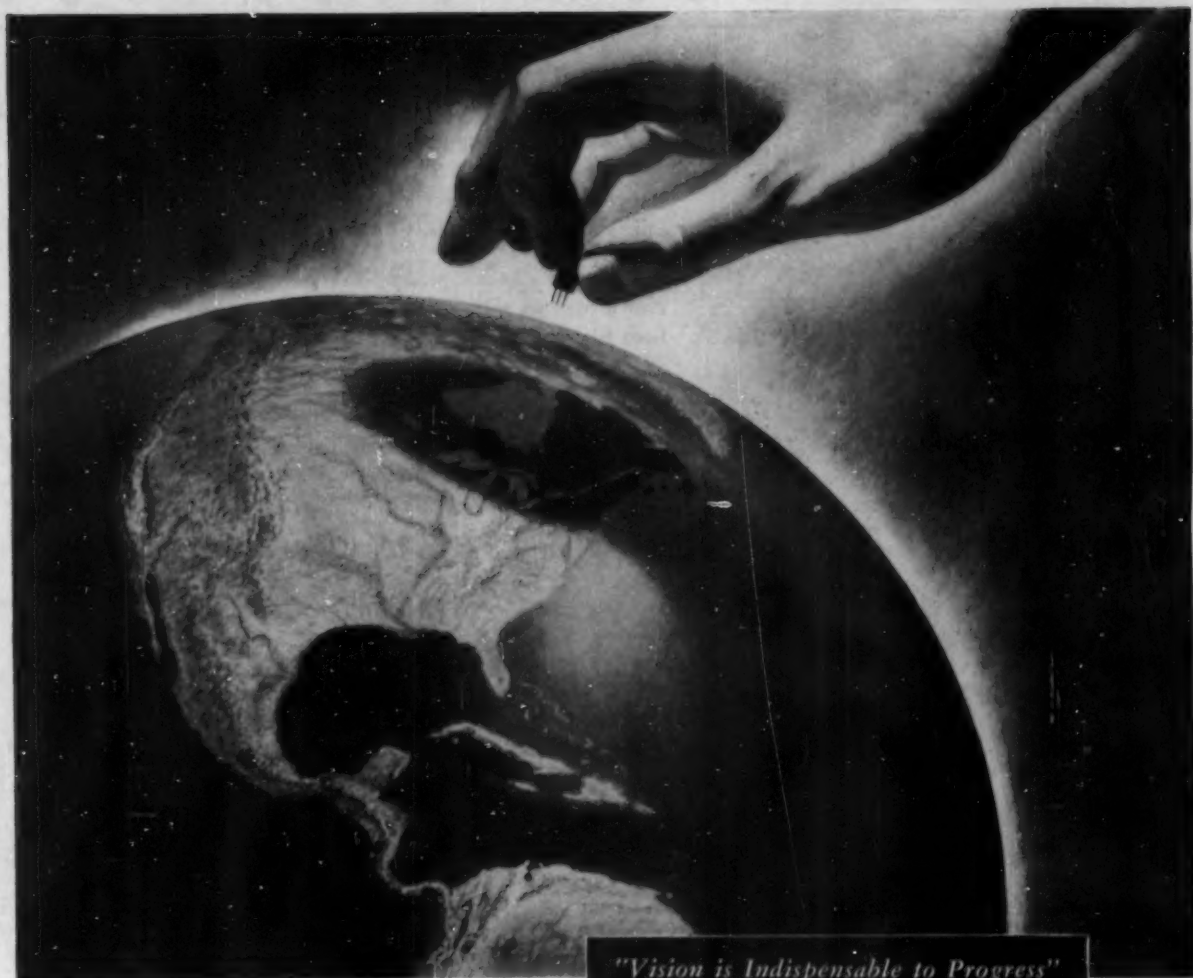
HIGHER FLANGE REDUCES WEAR

As shown by the red area above, the higher flange provides a large two-zone contact area for the roller heads. This greatly reduces wear—cuts "end" play—improves roller alignment. Larger oil groove provides positive lubrication where it counts most.



BOWER

ROLLER BEARINGS



"Vision is Indispensable to Progress"

How a speck of crystal is changing your life—your world

Advances so startling that only ten years ago they might have been subjects for science fiction are being chalked up by electronics—the fast-growing industry that harnesses electrons with vacuum tubes and their equivalents. More and more, as human impulses prove too slow to control the latest tools of science and industry, miniature tubes and semiconductor devices, such as 1/10 oz. transistors are taking over.

Today new radars keep tabs on storms and hurricanes, bring in ships and planes. Promised for the future is an electronic unit to lead the blind. Other devices now perform elaborate record-keeping tasks for business.

As the electronic microscope and betatron point to victory over dread diseases, another electronic instrument makes blood counts in seconds. Equipped with tiny transistors, midget radios run for years. New solar batteries take their power from the sun. TV programs recorded on magnetic tape, light amplifiers, electronic air conditioning and other appliances are in various stages of development.

Some of the most impressive work of electronics shows up in industrial

controls—"black boxes" packed with electronic magic—which direct rivers of steel, guide precision drilling, measure metal thickness and detect flaws.

Guided by self-reliant enterprise, the electronics industry has already found ways to lighten man's tasks and lengthen his leisure, to entertain, defend and heal him. Only in a free competitive system can progress take such giant strides, achieving so much good for so many to share.

BANKERS TRUST COMPANY

16 WALL STREET, NEW YORK 15, N. Y.

MEMBER FEDERAL DEPOSIT INSURANCE CORPORATION



"Not a man in sight..."

As I was driving along a country road with four other women as my guests a tire went flat. My heart sank with it, for my tire-changing experience was nil and the road was empty of aid. Pulling to the side, I hunted out the tools, remarking as I did so:

"Not a man in sight, of course. What we need is an angel from heaven!"

Imagine our astonishment when a cheery voice above our heads said, "I'll be down in a minute, lady." Unknowingly, I had stopped beside a telephone pole at the top of which sat our "angel"—a line repairman.

From the Reader's Digest feature, Life in These United States... "true stories showing appealing or humorous sidelights on the American scene."



A Friend in Need

We got a chuckle out of that little story and we hope you did too. Best thing about it is that it isn't an isolated case.

Many a time each day, telephone men and women go out of their way to help someone in trouble. Their friendly, neighborly spirit is one of the nice things about telephone service.

BELL TELEPHONE SYSTEM



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BUSINESS WEEK • May 21, 1955



An authentic report on the handling of heavy Bomber Wings by SERVEL, Inc.



The Servel dolly has a geared mechanism that provides 360 degree rotation of wing for handy work.

FAULTLESS SERIES H-300

This husky caster is scientifically strengthened at the right places so as to carry the increased loads. Its unflinching performance is due to a combination of well balanced features.

The portable fixture-dolly shown above (called a Rotary Wing Dolly) designed by Servel engineers for moving bulky, intricate aircraft wings, is constructed of ¼" plate and 8" tube steel. Weighing approx. 1 ton each, these unique materials handling devices are mounted on 4 Faultless H-306-10 swivel casters. These heavy duty industrial casters have 10" dia. semi-steel wheels equipped with roller bearings in the hub and two rows of balls for the swivel bearings. A ½" thick top plate and ¼" heavily corrugated side members add extra strength. Dustproof swivel construction assures long, trouble-free material movement easily lubricated at all times. We can help solve your caster problems, as we have for Servel, Inc. Simply call your local Faultless Caster Distributor listed in your phone directory or write us today.



Exploded view of swivel



2 full rows of hardened ball bearings above and below the caster horn top plate.

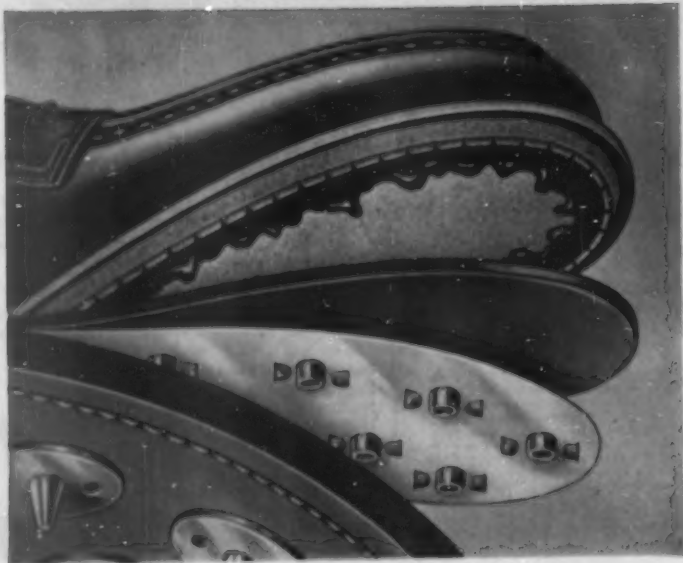
2 complete uninterrupted ball bearing hardened race-ways of large diameter.

Each month the solution to a real materials handling problem is fully presented in a free, handy size folder. To get the complete illustrated story on the Servel caster application mentioned above, write today on company letterhead.



FAULTLESS CASTER CORPORATION, EVANSVILLE, IND.

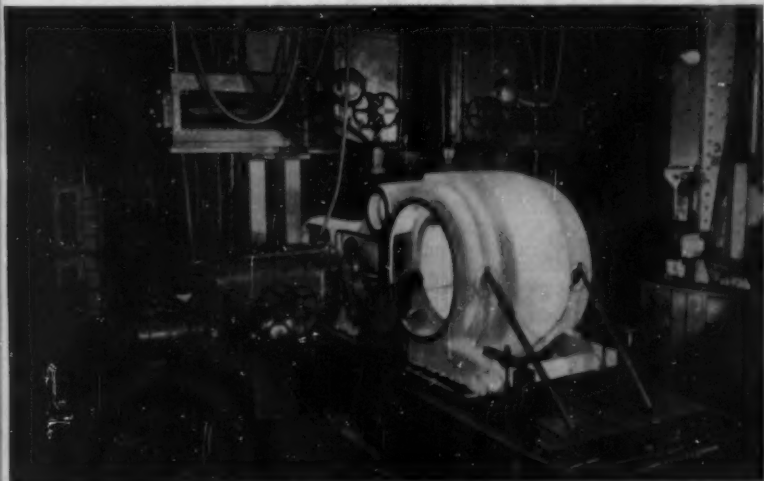
Only STEEL can do so many jobs



Steel Diet for Golf Shoes. If you play 18 holes of golf on a normal course, you take about 12,000 steps, so a light shoe is very important. The world's largest golf shoe manufacturer found a way to reduce weight by $\frac{1}{8}$ —by adding steel construction. The spikes screw into an inner sole plate made from USS Stainless Steel. The resulting shoe is feather-light, flexible as your foot, and you never feel the spikes.

so well

Wheat Suffocation. Stored wheat needs lots of air, or it will mildew and rot. Giant-sized USS American Quality Springs are covered with Cyclone Insect Screening to form tunnels through the wheat piles. Air is pumped through under pressure to ventilate the wheat, and keep it sweet and dry.



Thousands of Horses . . . Coming Up!

It takes gasoline to get the horsepower out of your automobile, but first it takes horsepower to get the gasoline out of the ground. Shown here is the power frame for a gigantic "Oilwell" slush pump that utilizes nearly 1,000 input horsepower to force mud down into an oil well while it is being drilled. United States Steel makes a complete line of oil drilling, production, pipe line and refining equipment.



Hard as Steel, Soft as Rubber. The wheels of most trolley cars have a hard steel rim, but they are fastened to the hub with a band of tough rubber. These Resilient Steel Wheels, supplied by United States Steel, last longer and ride easier than solid steel wheels.

SEE The United States Steel Hour. It's a full-hour TV program presented every other week by United States Steel. Consult your local newspaper for time and station.



This trade-mark is your guide to quality steel

UNITED STATES STEEL

For further information on any product mentioned in this advertisement, write United States Steel, 535 William Penn Place, Pittsburgh, Pa.

AMERICAN BRIDGE...AMERICAN STEEL & WIRE and CYCLONE FENCE...COLUMBIA-GENEVA STEEL...CONSOLIDATED WESTERN STEEL...GERRARD STEEL STRAPPING...NATIONAL TUBE
OIL WELL SUPPLY...TENNESSEE COAL & IRON...UNITED STATES STEEL PRODUCTS...UNITED STATES STEEL SUPPLY...Divisions of UNITED STATES STEEL CORPORATION, PITTSBURGH
UNITED STATES STEEL HOMES, INC. • UNION SUPPLY COMPANY • UNITED STATES STEEL EXPORT COMPANY • UNIVERSAL ATLAS CEMENT COMPANY 9-412

The TUBELESS



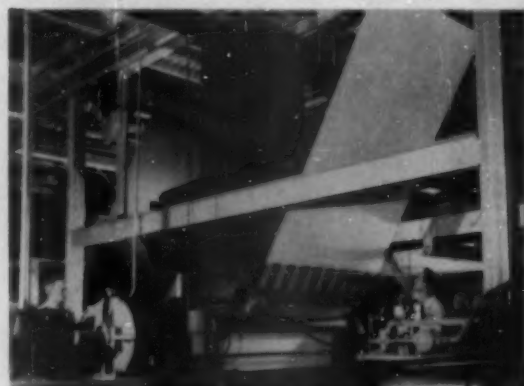
THE NEW Plus-Quality Firestone

STANDARD EQUIPMENT ON THE NEW 1955 CARS... YOU CAN PUT THEM ON YOU

THE new tubeless tires that are standard equipment on the new 1955 cars, provide wholly new concepts of safety and economy for the car owners of America. But all tubeless tires are not alike! They differ greatly, in performance, in safety and in quality. One tire, and only one, the new Firestone De Luxe Champion Tubeless Tire, gives you, *at no extra cost*, exclusive built-in extra values that you cannot get in any other tubeless tire. Many of the most important features of these plus-quality tires cannot be copied by other tire makers.

Until now, tubeless tires have always sold at premium prices. But Firestone, after years of research and after investing many millions of dollars in engineering, in facilities and in new equipment, showed the industry how to build them to sell at the price of a conventional tire and tube.

You can have your present car equipped with a set of new Firestone De Luxe Champion Tubeless Tires without changing your present wheels or rims. They cost no more than conventional tires and tubes and your nearby Firestone Dealer or Store will give you an allowance for the unused mileage in your present tires. You can buy on convenient budget terms, if you desire.



This is the only complete cord treating factory of its kind in the world. In it, the cord used in the bodies of Firestone tires is Gum-Dipped and Safety-Tensioned to "set" the cord so it cannot expand when it gets hot from fast driving, causing the tread to crack and separate from the tire body. Safety-Tensioning and Gum-Dipping were originated by Firestone. No other tires can give you this extra safety feature.

Enjoy the Voice of Firestone on radio or television every Monday evening over A

S TIRE-Plus

Only Firestone Gives You All of These

Plus Advantages



Blowouts Practically Eliminated

With the new Safety-Tensioned Gum-Dipped Cord Body, the new Safety-Liner and Tubeless Construction, damage which might cause a blowout in a conventional tire merely causes a slow leak in the new Firestone De Luxe Champion Tubeless Tire, giving you plenty of time to bring your car to a safe, straight-line stop, even from high speeds. This tire is so strong and the tread so tough that it gives protection even against terrific impacts.



Hushes Squal, Whine and Hum

The Silent-Ride Safety-Grip Tread is scientifically designed for quiet running. Instead of adding stabilizers to the tread as an "after thought," the outer grooves are stabilized by the elements of the tread itself, thereby eliminating the cause of squealing on turns. Furthermore, the traction elements in the tread overlap each other, which prevents annoying whining and humming on the road, even on wet pavements and on wet brick.



Unequalled Non-Skid Protection

The new Silent-Ride Safety-Grip Tread provides greater protection against skidding and side-slips and greater traction than any other tire on the market except, of course, special winter tires. The tread elements are scientifically-angled for maximum skid-resistance in all directions and for utmost traction. The new Firestone De Luxe Champion Tubeless Tire has more inches of non-skid edges than any other tire of similar type and price.



Seals Punctures Against Air Loss

If a nail or any other sharp object should possibly penetrate the extra-tough tread and cord body, the Safety-Liner, which is inseparably welded to the inside of the tire body, grips the nail and prevents loss of air, thereby minimizing the danger and annoyance of punctures. You can keep on going until you have time to have the nail removed and the tire repaired at a service station. No need to change tires on the highway.



Something New in Riding Comfort

The new Firestone De Luxe Champion Tubeless Tire absorbs bumps and road shocks which conventional tires transmit to the frame and body of the car and thus to you and your passengers. It provides a super-soft cushion of rubber and air which helps smooth out even the roughest roads. It makes steering easier . . . and it has an extra-tough Curb Rib which protects white sidewalls against damage and scuffing and preserves the beauty of the tire.



Most Miles Per Dollar

Every part of this amazing new tire is built for long, trouble-free mileage. The Silent-Ride Safety-Grip Tread is made of extra-tough, wear-resistant rubber. It is road-level flat for maximum contact with the road and utmost mileage. The Safety-Tensioned Gum-Dipped Cord Body is locked or "set" so that it cannot expand or "grow" and cause the tread to crack and separate, thereby ruining the tire. It is so strong it can be retreaded again and again.

* DELUXE CHAMPION Tubeless Tires

PRESENT CAR AT NO EXTRA COST AND WITHOUT CHANGING WHEELS OR RIMS

Copyright 1955, The Firestone Tire & Rubber Co.

* Also available for use with rims.

ATTENTION

all users of
OFFSET
PRINTING EQUIPMENT!

Would you like to make paper plates from existing material by a photographic process that costs only one half ($\frac{1}{2}$) of your present method?

?

Would you also like to make these plates in one quarter ($\frac{1}{4}$) the time now used?

?

Would it interest you to know that a single unit of equipment is available to do this for \$325.00?

?

Would it further interest you to know that this single piece of equipment will make three or more copies of anything typed, written, printed or drawn up to 8½" x 14" on ordinary (uncoated) paper as well as making OFFSET plates?

?

Here's the answer . . . made and guaranteed by **PHOTOSTAT CORPORATION** . . . the greatest name in the photographic reproduction industry.



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Instant Copier
For use in every office
. . . anywhere.

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Our representative will gladly demonstrate and make plates in your office.
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Service offices in all principal cities and in Toronto, Canada.

PHOTOSTAT is the trade-mark
of PHOTOSTAT CORPORATION

READERS REPORT

Radio-active Waste

Dear Sir:

The article, "Getting In on the Ground Floor" in the May 7'55 issue of *BUSINESS WEEK*, says [page 78] that a really efficient method of disposition of radio-active waste has not been discovered, and that no one has come forth to tackle the problem on a free enterprise basis.

In fact, a fascinating and apparently effective method is presently in use. Then in an experimental stage, it was described in *NUCLEONICS* Dec. 1954, p. 14. The company whose product is involved is the Filtrrol Corp. of Los Angeles, maker of petroleum catalysts.

In the process a special clay is extruded in tube form. Through these tubes is run the radio-active fluid or water. The clay absorbs the radio-active particles and the fluid is purified. Then the clay tubes are fired in a kiln, and they become a glasslike ceramic, thus permanently imprisoning the radio-active particles. The ceramic can then be buried, as is, with no danger that the hot particles can be leached out by ground waters, etc. This is much better than burying the water itself in large stainless steel tanks.

JOSEPH R. HARRISON, JR.
CHICAGO, ILL.

No Secret Depression

Dear Sir:

I didn't know that we were in the depths of a major depression. The retail market in the U. S. must have collapsed without the retailers knowing anything about it. Of course, I am referring to *BUSINESS WEEK* [May 7'55,p44], "Retail Profit Picture Brightens" which states that the governmental figures show that total retail sales hit \$14.2-billion last year.

Food chains [2 stores or more] alone accounted for \$17-billion this past year; the top 20 retailers—according to your estimate in the chart on page 44—were \$16.8-billion; and I hate to think of what happened to all the other people in the retail industry.

Did you skip a decimal point, or has Washington weather kept the slide rules warped? Admittedly the latter possibility could be, if you glance at *CHAIN STORE AGE*, Grocery Edition for May, page 3, for a comment on what the Dept.

of Commerce has done to the figures in the food field.

CALVET M. HAHN
NEW YORK, N. Y.

• The \$14.2-billion figure was not for the whole year; it was the monthly average.

Mistaken Impression

Dear Sir:

I am not challenging the validity of the figures used in your article, "Television's Gain is Other Media's Loss" in your April 9, 1955 issue, p.62. However, I do protest that [it] tends to create a mistaken impression as to the status of radio broadcasting by its stress upon national advertising revenues, and its omission of any reference to the tremendous upsurge of local revenues in radio broadcasting.

Local revenues now account for upward of 55% of radio's total income. What's more, 1954 local sales exceeded those in 1953, to reach a new all-time high. Therefore, it is manifestly unfair to radio to use only the national sales trend as a barometer of its progress, when more than half of its revenue stems from other sources.

Broadcasting-Telecasting Magazine estimates the 1954 gross radio billings at \$715,146,000.00, a very substantial figure, indicative of radio's vitality. Indeed, it indicates that 1954 was the second largest year incomewise in the history of radio.

JOHN F. MEAGHER
VICE PRESIDENT FOR RADIO
NATIONAL ASSN. OF RADIO &
TELEVISION BROADCASTERS
WASHINGTON, D. C.

German Predecessor

Dear Sir:

I was rather surprised to read . . . in the April 2, 1955 issue of *BUSINESS WEEK* (page 56): "Important manufacturing economies at the [Ronson] company's new Stamford (Conn.) plant made the reductions possible . . ." The Ronson shaver bears the imprint "Made in Germany"—at least mine does.

L. VAN PHELAN
GENERAL MANAGER
ELECTROFILM, INC.
NORTH HOLLYWOOD, CALIF.

• The first Ronson electric shavers on the market were indeed made in Germany, as reported in [BW—Mar.6'55,p110]. However, Ronson

75 Years of Church Specialization . . .

Practically every important cathedral built in the last 75 years has employed the woodworking skill of Irving & Casson — A. H. Davenport Co. A typical example is Da Vinci's "Last Supper" (below) installed in the Upper Room Chapel, Nashville, Tenn. Measuring 18½ feet long, 8½ feet high, 12 inches deep, it is thought to be the world's largest wood carving.



Nine carvers, working in the Cambridge plant, spent almost a year in the completion of this reproduction of Da Vinci's work.



UNITED NATIONS BUILDING—Delegates' desks and chairs in General Assembly room at the United Nations are further examples of the craftsmanship of this century-old woodworking firm.

"Without it our buildings would not be standing today"

"At our factories in Cambridge, Mass., a flash fire occurred last December in the paint department", relates Mr. C. A. Thurston, Treasurer, Irving & Casson — A. H. Davenport Co., furniture manufacturers and custom builders of woodworking specialties. "Had it not been for our Grinnell Sprinklers going into action immediately, I am honestly afraid to think of the consequences."

"Most of our buildings are well over 125 years old. To replace them would cost perhaps a million and a quarter dollars. That is why we installed Grinnell Sprinklers as far back as 1900.

"Over the years we have had our share of fires. But on every occasion, our Grinnell Sprinkler System has been on the job and damage has been held to a few dollars. I am sure that without it our buildings would not be standing today."

Grinnell Sprinklers stop fire at its source, wherever and whenever it strikes, night or day, with automatic certainty. 77 years experience proves this. Moreover, a Grinnell Sprinkler System will often pay for itself in a few years through reductions in fire insurance premiums. Grinnell Fire Protection is an investment that pays real dividends . . . any way you look at it. Grinnell Company, Inc., 265 West Exchange Street, Providence, Rhode Island.



GRINNELL

PROTECTION AGAINST EVERY FIRE HAZARD



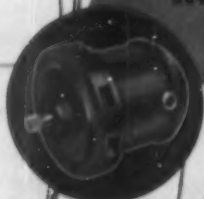
Manufacturing, Engineering and Installation of Automatic Sprinklers since 1878

standard in its field
the world over...

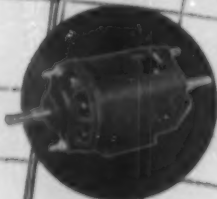


Turbine for
canister-type
vacuum cleaner.

Equal Quality Assured For YOUR Motor-Driven Products



Ruggedly constructed
equipment motor.



Lightweight motor for
portable devices.



Intermittent high
torque aircraft motor.

The outstanding quality and performance of the Lamb Electric vacuum cleaner motor, shown above, result from proper design and careful manufacture, by personnel having years of experience in the small motor field.

High quality and controlled costs go hand-in-hand because our company is equipped and organized to custom manufacture on a volume basis.

Ask us to demonstrate the benefits of Lamb Electric special application motors for your products.

THE LAMB ELECTRIC COMPANY KENT, OHIO

In Canada: Lamb Electric — Division of
Sengamo Company Ltd. — Leaside, Ontario

Lamb Electric
SPECIAL APPLICATION
FRACTIONAL HORSEPOWER **MOTORS**

announced long-range plans to manufacture the shaver here at a later date. They have now done that and are making at least part of the shaver in this country.

Where Credit's Due

Dear Sir:

John Stewart and I are pleased that you found our research of interest and reported on it in the April 30, 1955 issue of *BUSINESS WEEK*, under the title, "Will Customers Take a Chance?" [*New Products*, p.82].

This work was done under a grant from The Sloan Research Fund in the School of Industrial Management at M.I.T. We wish to acknowledge a debt of gratitude to Dean E. P. Brooks for the support he has given our work.

C. C. HERRMANN

ARTHUR D. LITTLE, INC.
CAMBRIDGE, MASS.

Retiring With Ease

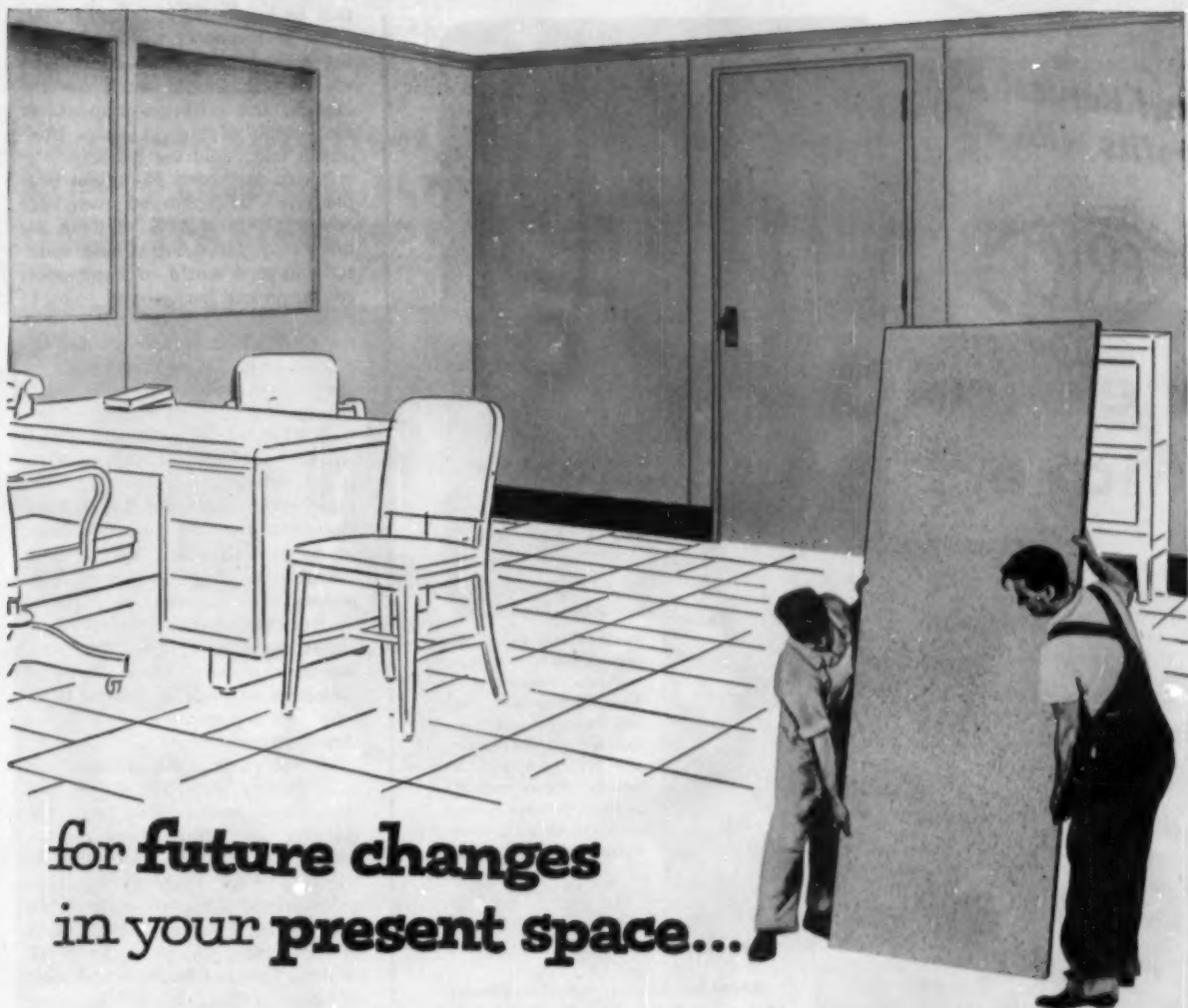
Dear Sir:

In the Apr. 25, 1955 issue of *BUSINESS WEEK* [p.66] there appears an article under the heading, "How To Ease Into Retirement," which I have read with interest and profit...

Retirement is the most radical change which ever comes into a person's life. We are trained when we go to kindergarten... to grade school... and to the university. We work there for four years or more learning a profession, and then struggle through life for some decades in an endeavor to earn a living. There are few institutions, however, and relatively few people who take any account of the sudden break which occurs at 65 to most people, until it actually has occurred.

Then those who have acquired much of this world's goods are apt to go to Florida, sit under a palm tree and await the undertaker. Those less affluent sit in a rocking chair and slowly move back and forth until, as a rule, they go to the hospital in a relatively short time. You cannot make this sudden break from mental and physical activity without deteriorating, unless you take on something that will give you the same stimulus you have had before.

The man who has acquired much of this world's goods upon retirement is usually considered to be completely independent. I feel that he is not—that he is entirely dependent upon those who are earning the returns on his securities and



for **future changes**
in your **present space...**

**J-M Class A Asbestos Walls are movable . . . save space and make space
. . . are noncombustible, moderately priced . . . come in pleasing colors**

New Johns-Manville Class A Movable Walls offer you advantages never before combined in an asbestos movable wall. They are modestly priced. They are noncombustible. They have a textured, stipple finish in restful colors. They reduce maintenance and relocation costs to a new low.

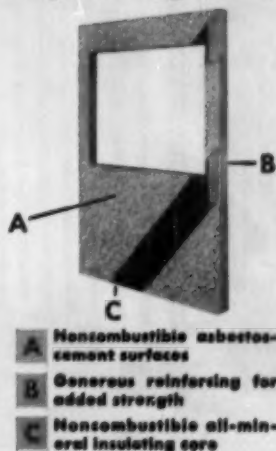
The finish of Class A Movable Walls is a tough, hard film many times thicker than on the usual movable partition. It is mar and scratch resistant . . . rejects stain and soil . . . can be easily washed and even scrubbed, if necessary. If damaged, it can be touched up inexpensively to look like new . . . and, unlike other types of factory-

finished partitions, can be repainted with ordinary paint.

Undivided responsibility for a complete job

These flush or glazed partitions are erected by the Johns-Manville Construction Department complete with doors, door hardware, glass and trim.

An estimate will convince you that the cost of J-M Movable Walls compares favorably with other types of wall construction. For details, write Johns-Manville, Department BW, Box 158, New York 16, N. Y. In Canada write 565 Lakeshore Road East, Port Credit, Ontario.



Johns-Manville

**Now! Harvest New
Profits with a**



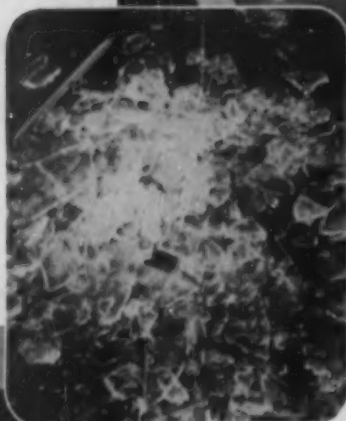
Shell-Ice Maker

You get ice quickly and
at big savings, with this
revolutionary method.

Below: Machine of 5 tons
capacity, ready for con-
nection to refrigerating
system.



Water flows down out-
side of tubes, providing
agitation necessary for
freezing into hard, clear
ice. Thawed and frag-
mented by warm gas,
ice $\frac{1}{4}$ " thick can be
harvested automatically
every 10 minutes. Curved
shell-like ice gives maxi-
mum cooling.

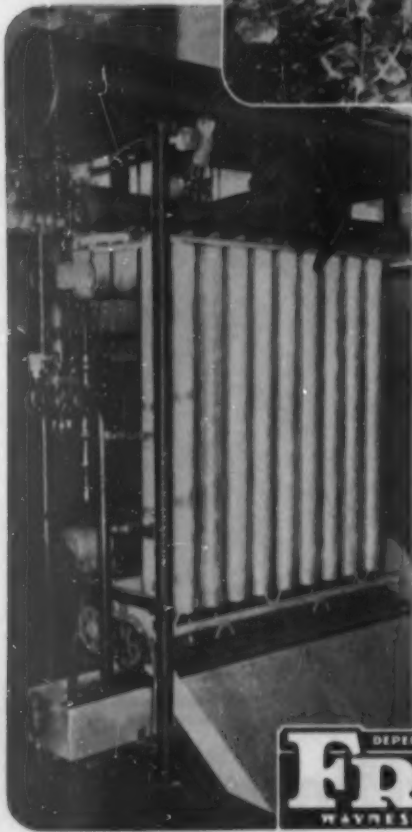


Ideal for dairies, fisheries, poultry
and vegetable packing houses, hotels,
restaurants, institutions, ice and in-
dustrial plants—wherever sized ice is
needed; specially profitable for cooling
drinking water and beverages.

Shell-Ice is frozen on stainless-steel
tubes by direct-expansion ammonia
or Freon, in thicknesses of $\frac{1}{8}$ to $\frac{1}{2}$
inch, and is broken by spinners into
odd-sized pieces as small as wanted.
No snow, scrapings or waste, and no
special cleaning required. Shell-Ice is
dry and solid, and with average good
water is clear.

The Shell-Ice Maker is highly effi-
cient, automatic and economical. All-
steel construction. Built in 12 standard
sizes, $\frac{1}{2}$ to 30 tons ice-making capacity
each. Requires very small floor space.
Dozens already in satisfactory service.
(Patents applied for.)

Get the whole story: ask for Frick
Bulletin 54: write



that he has no right to accept this
labor and support without return-
ing something to the community
for it. He should work for the
church, the civil government, or
the benefit of individuals or busi-
nesses that could use his help.

There are some 16-million peo-
ple over 65 scattered over this
country. About 47% of them are
financially independent and natu-
rally have a world of experience,
education and background going to
waste, unless they can be induced
to volunteer their services for the
benefit of others. There are about
3-million businesses in the country,
2½-million of which employ less
than 50 people. This small business
is the backbone of the country.
It is horrifying to realize, however,
that 95% of the businesses that are
started, fail in less than two years
of their birth date. We here in
Wilmington and elsewhere have
proven that oldsters in a com-
munity can prevent this failure, in
almost every instance, by volunteer-
ing their services as a Board of
Directors, to guide and advise those
who are trying to earn a living
through these means.

If one starts a haberdashery in
a small way, they are saying that
they know how to buy, sell, ad-
minister an office, keep books,
something about taxation, the in-
tricacies of an inventory and how
to overcome them, etc. There are
few people, even with long years
of experience, who really know all
of these facets of business and most
of those starting in, fail in some
respects. The termites get into
some of the unknown categories
and they are in trouble. The old-
sters can supply this knowledge
which they are lacking, and save
the misery and loss which almost
always follows.

If by any means you can influ-
ence others to do anything of this
sort, I am sure it will be helpful
to many people.

MAURICE DUPONT LEE
WILMINGTON, DEL.

A "Small" Million

Dear Sir:

In reviewing the graph and chart
in [BW—Apr. 23'55, p25] I note that
the column for the year 1956 does
not add up. I don't intend to be
critical, just curious, because the
amount involved is rather small.

F. B. O'NEILL
NORTH KANSAS CITY, MO.

• Sorry. The 1956 figure should
have been \$7,660-million.

Q. Could chemical research create electrical insulation to keep pace with the ever-increasing demands of hotter-flying jets?

A. INSULATION THAT LETS 'EM FLY HIGHER, FASTER, HOTTER!

Another example of



**CHEMICAL
PROGRESS**



Today's supersonic jets are flying higher, faster—and hotter! When conventional insulation failed to meet the new critical temperatures and higher voltages, General Electric chemical engineers applied G-E mycalex—a blend of mica and a special glass.

G-E mycalex "nests" now surround AN connectors of the jet's pulsing electrical circuit . . . withstanding super-hot flames for twenty crucial minutes or longer. G-E mycalex circuit breakers now provide resistance against the destructive power of flashing arcs.

So jets fly hotter—yet more safely—thanks to G-E

mycalex. It's one more instance of progress for all—through G-E chemical progress.

★ ★ ★

For new developments in Plastics Compounds, Silicones, Electrical Insulating Materials, Industrial Resins and Varnishes, Plastics Laminating and Molding . . . write for "G-E Chemical Products" booklet (CDG-101) to: **CHEMICAL and METALLURGICAL DIVISION**, General Electric Company, Section 1500-2A, Pittsfield, Mass.

Progress Is Our Most Important Product

GENERAL  ELECTRIC

A Better America Through Chemical Progress



The Historical Society's Lowell Miller, and Mr. Bullis.

Visiting Wausau at the invitation of Employers Mutuals, Mr. Bullis saw special meaning in the Cyrus Yawkey home. "50 years ago, this picturesque place was the home of one of Wausau's pioneer lumbermen. It's being made into a museum. That's Wausau. It has respect, even affection, for the past—and yet a healthy awareness that it was the past. The passing of the great lumber days never stopped Wausau."

How a fancy doughnut and a pioneer lumberman's home said "Wausau Personality" to General Mills' Chairman Harry Bullis

Wausau Story

Mr. Bullis found a good *personality* about Wausau. You'll find it too—in Employers Mutuals' representatives wherever you are. We have a reputation for being good people to do business with.

Our specialty is workmen's compensation insurance. Many of the country's largest firms are our policyholders. Yet a great part of our business is with companies employing a small number of people.

Policyholders like the way we handle their claims—with a speed unexcelled in the business and a fairness that bends over backwards.

They like the *extras*, in service and understanding, that are behind every Employers Mutuals' policy.

Larger policyholders especially like our fresh, enlightened view of workmen's compensation. We don't believe such insurance is just a way to pay accident claims. Under Employers Mutuals' supervision, it can actually lower costs of production and improve over-all profits. May we show you how?

Employers Mutuals writes all lines of casualty and fire insurance. Phone our nearest office, or write Wausau, Wisconsin.



Hal Heverson of General Mills and Mr. Bullis relish a taste-test of Ray Gregory's "Parisian Puffs."

"If I were going to open a bake shop, it would be one like Ray Gregory's. High quality foods and a wide variety of them. Wausau people, like most Americans, want quality, and they support those businesses that provide it.

"I wish I hadn't missed the Saturday Bake Sale at the Public Service display rooms. They tell me Wausau housewives make good home-made bread."



Mr. Bullis "baby-sits" with young Duane Ninnemann while Mother shops.

"Miller's Supermarket typified Wausau's present and future, as the Yawkey home symbolized the past. Julius Miller had done business downtown for 30 years. Recently, he and his son opened this spacious, beautifully laid-out store in an out-lying district... the first store in a projected modern Shopping Center.

"Good people to work with, live with, be with. Yes, that's Wausau."

Employers Mutuals of Wausau





Moisture stays in, so meat stays fresher and better-looking in this carcass wrap that's easy to put on, protects in storage and transit, and carries attractive printed designs and trade-marks.

meat wrap or

"fish" wrap



Capable of staying at sea for extended periods, the U.S.S. Nautilus is coated with an anti-fouling system of resin-based paints that protects against growth of marine organisms, reducing maintenance and out-of-action time.

Vinyl, Polyethylene, Polystyrene, Phenolic, and Epoxy Resins for coatings on paper, foil, film, metal, wood or masonry.



Meat stays fresher longer in Swift & Company's new carcass wrap. The cotton cloth coated with BAKELITE Brand Vinyl Resins keeps moisture in.

And the new U.S.S. Nautilus stays "fresher" longer —its covering of anti-fouling paint virtually eliminates growth of marine organisms. The smooth, lasting surface means greater speed through the water, more time at sea. Bakelite Company supplies vinyl resins that meet the requirements for such coating systems.

Whatever your problem in protective coatings for equipment, packaging, buildings, or products, bring it to Bakelite Company, manufacturer of the greatest variety of resins for coatings. Write Dept. HM-14.

BAKELITE COMPANY, A Division of Union Carbide and Carbon Corporation **UCC** 30 East 42nd Street, New York 17, N. Y.

The term BAKELITE and the Trefoil Symbol are registered trade-marks of UCC



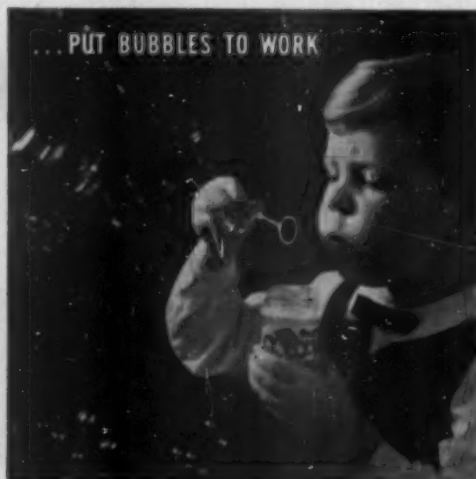
HOW HERCULES HELPS...



◆ "PLASTIC" INK with the necessary flexibility, hardness, and marproofness for printing on packaging films such as Saran and Mylar, is made possible by the use of Hercules® nitrocellulose as the film-former. Excellent adhesion is secured by plasticizing with Abitol® (Hercules Hydroabietyl Alcohol) and Hercules Synthetics B21 resin.



◆ FINGERTIP CONTROL of fingerprint cards and other records is provided by modern automatic filing equipment. These record cards must be capable of being written on with pen and ink and must be protected from permanent damage in the event of accidental wetting. These necessary requirements are obtained through the use of Hercules Pexol® in sizing the paper.



◆ A PLAYFUL DEMONSTRATION of the exceptional film-forming properties of Hercules® CMC is provided by these soap bubbles. In industry, CMC has proved its value as a general-purpose, water-soluble film-former, adhesive, water binder, and suspending agent.

HERCULES
CHEMICAL MATERIALS FOR INDUSTRY

HERCULES POWDER COMPANY

968 Market Street, Wilmington 99, Delaware. Sales Offices in Principal Cities

SYNTHETIC RESINS, CELLULOSE PRODUCTS, CHEMICAL COTTON, TERPENE CHEMICALS,
ROSIN AND ROSIN DERIVATIVES, CHLORINATED PRODUCTS, EXPLOSIVES, AND OTHER
CHEMICAL PROCESSING MATERIALS



BUSINESS OUTLOOK

BUSINESS WEEK

MAY 21, 1955

A BUSINESS WEEK

SERVICE

If you want some revealing glimpses of the internal mechanism of a boom, take a look at inventories.

Manufacturers generally are trying to build up their stocks. But the pace of sales is so brisk they can't do it.

There has been remarkably little inventory building over the last eight months—despite the rapid rise in industrial output. High sales have been cleaning out the shelves, with few exceptions.

Factory holdings of many raw materials, especially metals, are modest, even skimpy, when you consider the rate at which goods are being turned out. And there's the chance that strikes will hobble some materials suppliers this summer.

Most producers see little chance of refilling their warehouses as long as sales hold at present rates. Some say they would welcome a little slack time this summer. They may feel differently, of course, if a slowdown actually comes.

Finished goods in the hands of retailers are the only stocks that have shown visible gains since last August.

Ordinarily a bulge in stocks of finished goods would be a sign that consumer appetites were flagging.

But the recent gains have not been general. Most of the rise has been concentrated in one spot: dealer stocks of autos.

Dealer stocks of new cars hit an all-time high of 757,856 as of May 1, according to Automotive News.

This is a rise of 400,000 since the first of the year. That compares with a rise of about 150,000 in the same period in 1953 and 1954.

Part of this year's rise represents the usual buildup as the peak buying season approaches. Some of it is doubtless a strike-hedge.

Planned or unplanned, stocks are still comfortable according to dealers. They say 750,000 cars is just a shade over one month's sales at present rates.

Over-all, the inventory figures suggest that the underpinnings of today's boom are stronger than they were in 1953, the previous peak year.

In 1953, about \$5.4-billion of the \$369.9-billion peak rate of goods and services output was going into stocks. When the trend reversed, it took 12 long months to work these inventories down.

Today, we are getting \$370-billion in goods and services, but only \$1.3-billion of this is going into inventories.

—•—

It is strength in consumer hardgoods that has helped put the Federal Reserve Board's industrial production index within a point of its all-time high.

Autos, of course, have taken most of the headlines—and most of the bows—in the upturn.

But the early year rebound in major household appliances is striking.

BUSINESS OUTLOOK (Continued)

BUSINESS WEEK

MAY 21, 1955

Output here has been chewing up some of the metals and other materials that helped the index put on points.

Lower price tags are figuring in more appliance sales, even though output keeps increasing.

Customers are buying from the low-end of some appliance lines. In television, for instance, this means more table models, fewer consoles.

Appliance makers have learned to cut corners. The insides of many plug-ins are simpler, outsides are plainer, and some of the hand work has yielded to automatic processes.

And appliance dealers have been learning to live with the discount house. This has meant some paper-thin mark-ups.

Discount houses have been forcing new ways of doing business on the established appliance dealers. Here's one new wrinkle:

More dealers are hanging on to their last year's overages as new models start to appear. Some even rush orders just before the model change.

If the customer balks at the price tag on the new model, the dealer can then offer him a "special" on last year's model.

Air conditioners seem to be an exception to the lower price trend in appliances. New models have higher price tags than the customers have seen for some time.

That's because the industry has finally worked out of the trouble it got into last year. Last summer's cool weather left stocks high. To clean up the inventories, dealers offered hefty off-season discounts. Now they have stocks back in line, and prices have risen again. But dealers wonder if 1955 price tags won't seem a little high after the winter price cuts.

—•—

April housing starts help put 1955's home building boom into focus.

In the late winter months, activity was so much above what you would expect that there was worry about the boom getting out of hand. Starts were running over 1.4-million at a seasonally adjusted annual rate.

There were 127,000 units started last month, or 1.3-million at a yearly rate. That's still a very good figure, but it's not phenomenal for a month that ordinarily sees an upswing in building.

Contractors are getting a taste of 1955's incipient cost inflation (BW—May 7'55, p17).

Prices of materials and equipment have been moving up sharply on the Engineering News-Record's construction cost index since the first of the year. Last year, there was general stability in the same period.

And the big push in labor negotiations won't hit the industry until later this spring.

This could mean slim profits for many contractors, despite booming business. Sharp bidding on many types of heavy construction work continues in the face of rising costs.

Another Moore first

This is a new kind of business form.

Moore developed it. The revolutionary feature

is narrow carbon paper, which never

interferes with the writing machine feeding

devices. As a result, Speediflo control

margins do not clog or jam during the fast

tab runs. Each set is manufactured so

precisely that carbons won't creep or slip.

Any or all parts, and carbons, may be held

together for machine or system requirements.

Speediflo saves \$8,300

Entirely new methods of production create

economies for Moore customers. One big user

saves \$8,300 a month in form costs.

Ask the Moore man to demonstrate Speediflo.

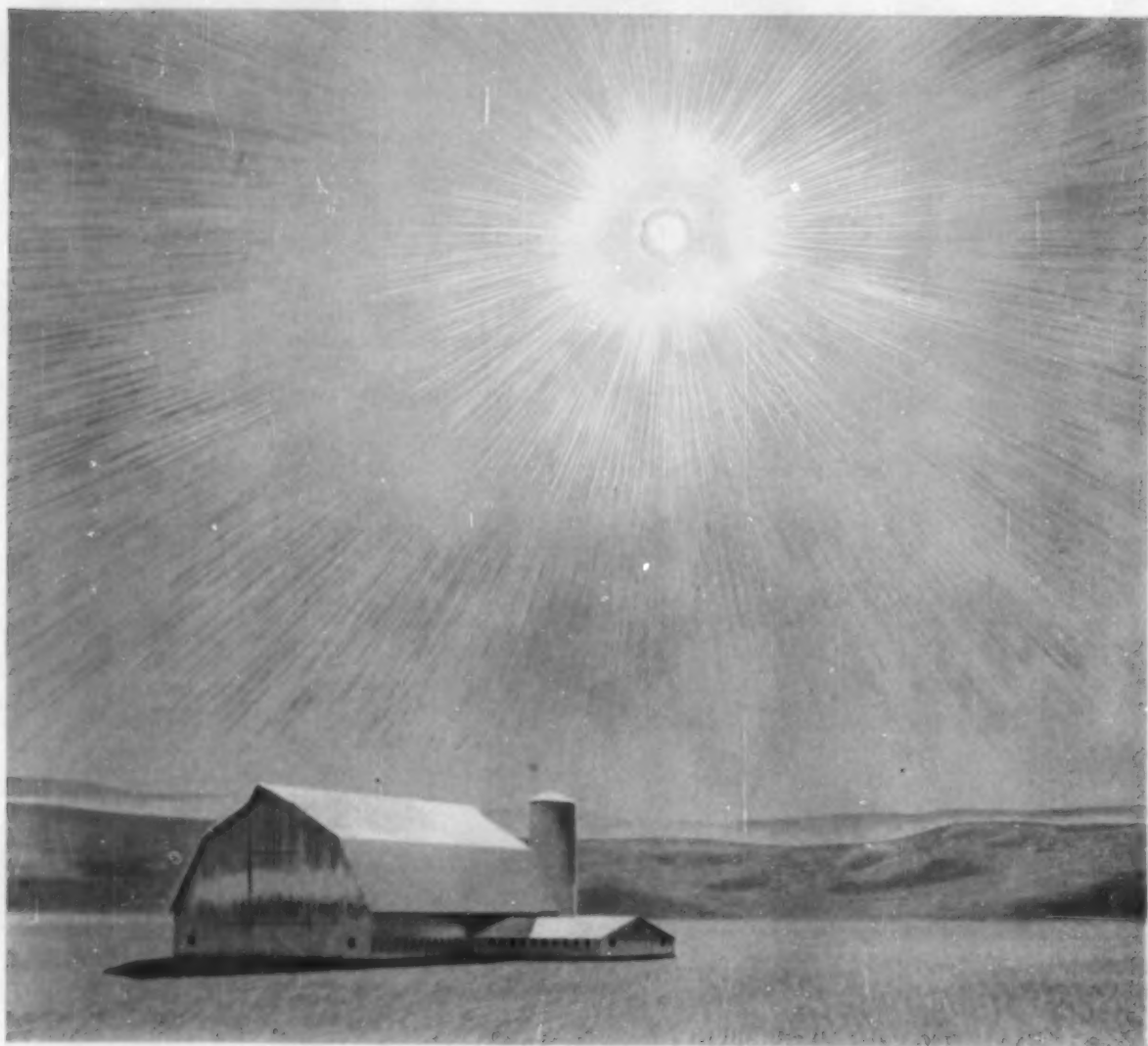
MOORE BUSINESS FORMS

Inc.

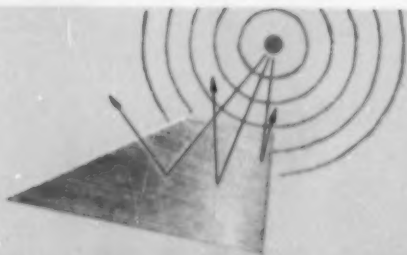
Since 1883—the world's largest
manufacturer of business forms
and systems

Look up the Moore man
in the Classified or write us
at Niagara Falls, N. Y., Denton, Texas
or Emeryville, Calif.

Over 300 offices and factories
serve U. S. and Canada.



When it must reflect heat...



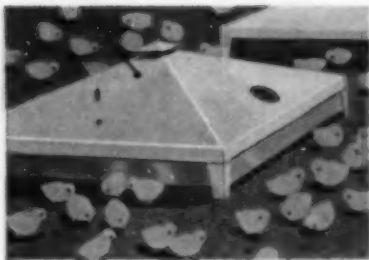
IN SUMMER, the high reflectivity of Kaiser Aluminum causes hot sun rays to "bounce off" . . . thus permanently keeps interiors as much as 15° cooler.



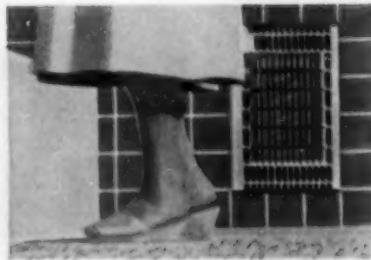
IN WINTER, the high reflectivity of Kaiser Aluminum helps to keep heat from escaping by reflecting it inwards . . . increases comfort, helps cut fuel bills.



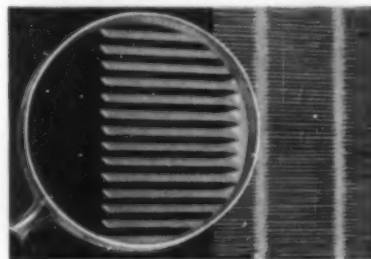
Foil the weather! Walls insulated with Kaiser Aluminum foil reflect heat back into rooms, and similarly keep it out during summer. Low in cost, easy to install.



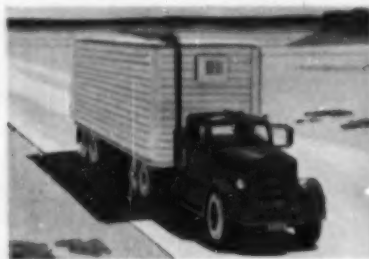
Slick for chicks! In chick brooders, Kaiser Aluminum's reflectivity protects chicks by providing balanced heat distribution. Light weight makes units easy to move.



Warm up—fast! Aluminum reflectors in modern heaters quickly reflect heat into rooms, distribute it evenly. You get more heat, more comfort—and lower fuel bills.



Keep rooms 15° cooler! Kaiser Aluminum Shade Screening has tiny louvers set at an angle, blocking sun rays. Reduces glare. Protects furnishings from sun fading.



It's cool inside! Kaiser Aluminum's reflectivity keeps truck interiors pleasantly cool. Assures greater driver comfort, greater protection for perishable cargoes.



Regulate your temperature! Shingle roofing made with reflective Kaiser Aluminum provides winter warmth, summer coolness. Never needs paint, can't rust or rot.



Calling all cooks! Used for broiler pans, Kaiser Aluminum reflects heat and spreads it evenly for faster cooking. Line broiler pan with Kaiser Foil to eliminate scouring.



Tops for oil—Reflectivity of Kaiser Aluminum makes it ideal for tops of oil storage tanks because it cuts heat evaporation. Resists corrosive brine, sulphide content.



Hold that heat! Vacuum jugs, made with Kaiser Aluminum, hold heat longer. And aluminum's strength and corrosion resistance makes them last.

think of *Kaiser Aluminum*

CLIMB up on a ladder some hot, sunny day and hold your hands over an aluminum roof.

You'll find that heat bounces off the aluminum the way a rubber ball bounces off a brick wall.

That's because aluminum *reflects heat* as almost no other metal does. And *look* at these other advantages of aluminum. It's light and strong. It resists rust and corrosion. It's workable and economical.

This *versatility* of aluminum is the big reason why it has taken the place of other materials in thousands of useful products—making these products better—and cheaper.

In recent years, more and more manufacturers have come to think of Kaiser Aluminum for an abundant source of supply and for dependable customer service.

Kaiser Aluminum has led the industry in bringing more

aluminum to American manufacturers. In the past three years, we have more than doubled our production capacity and we now have the capacity to produce close to 30% of all the primary aluminum made in this country.

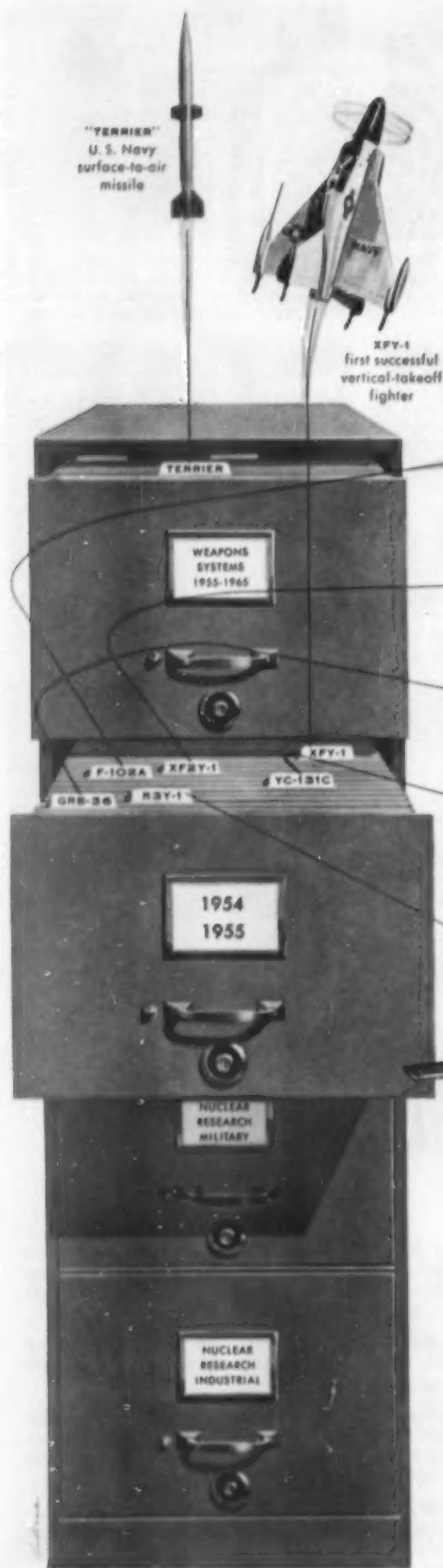
While increasing the supply, we have also increased the diversity of our mill products to provide manufacturers with aluminum in all its many forms.

We are continuing to expand. For we believe that aluminum is only on the threshold of its greatest growth. We are confident that the future opportunities for aluminum are almost as broad as the imagination.

We are dedicated to the job of working with manufacturers to help realize this brighter future through aluminum. Kaiser Aluminum & Chemical Corporation, 555 Kaiser Building, Oakland 12, California.

Top drawer developments

achieved through Convair's
ENGINEERING to the Nth POWER



"TERRIER"
U. S. Navy
surface-to-air
missile

XFY-1
first successful
vertical-takeoff
fighter

F-102A
All-weather
supersonic interceptor

XFY-1 "SEA-DART"
water-based
supersonic jet fighter

ORB-36 "AIRCRAFT CARRIER" - launches
and retrieves fighters in flight

YC-131C
USAF turboprop
transport

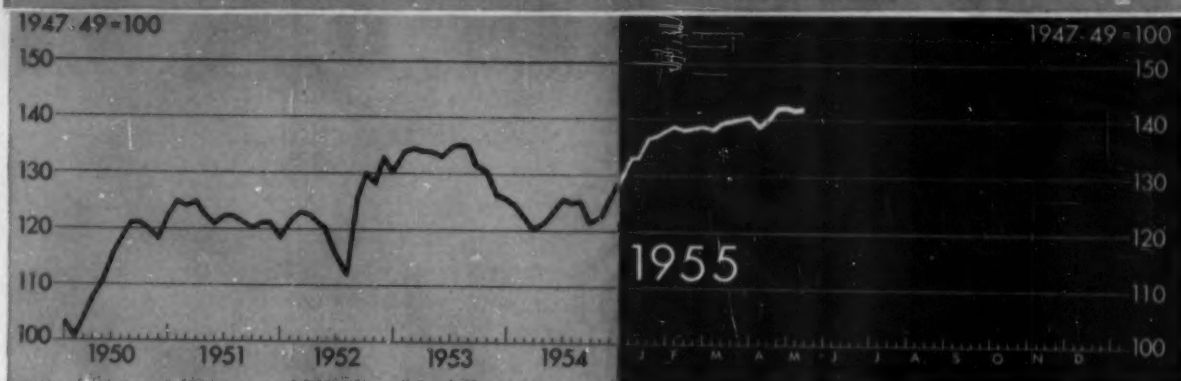
RSV-1 "TRADEWIND"
water-based
turboprop transport

Around these *top-drawer* developments at Convair, the men who plan the defense of our nation are building entirely new concepts of military strategy. Only Convair has designed and produced all basic types of aircraft - fighter, interceptor, transport, bomber, and water-based. And now, Convair has attained leadership in producing guided missiles that meet the most exacting military requirements. For our national defense... for your security, look to *Engineering to the Nth Power*.

CONVAIR

A DIVISION OF
GENERAL DYNAMICS CORPORATION

FIGURES OF THE WEEK



Business Week Index (above) [§]142.6 [†]142.1 140.3 124.4 91.6

PRODUCTION

Steel ingot production (thousands of tons).....	2,324	12,345	2,284	1,712	1,281
Production of automobiles and trucks.....	222,847	1215,756	218,078	153,796	62,880
Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands).....	\$74,265	\$70,393	\$55,261	\$58,732	\$17,083
Electric power output (millions of kilowatt-hours).....	9,673	9,586	9,602	8,380	4,238
Crude oil and condensate production (daily av., thousands of bbls.).....	6,681	6,688	6,828	6,428	4,751
Bituminous coal production (daily average, thousands of tons).....	1,448	1,433	1,371	1,138	1,745
Paperboard production (tons).....	274,269	271,427	266,031	252,436	167,269

TRADE

Carloadings: manufactures, misc., and Lc.I. (daily av., thousands of cars).....	74	73	72	67	82
Carloadings: raw materials (daily av., thousands of cars).....	50	48	39	41	53
Department store sales (change from same week of preceding year).....	+9%	+7%	+8%	-4%	+30%
Business failures (Dun & Bradstreet, number).....	233	237	204	248	22

PRICES

Spot commodities, daily index (Moody's Dec. 31, 1931 = 100).....	401.7	400.7	401.5	438.4	311.9
Industrial raw materials, daily index (U. S. Dept. of Labor BLS, 1947-49 = 100).....	91.5	91.4	92.4	86.8	1173.2
Foodstuffs, daily index (U. S. Dept. of Labor BLS, 1947-49 = 100).....	86.1	86.1	87.0	102.3	1175.4
Print cloth (spot and nearby, yd.).....	18.7¢	18.6¢	18.6¢	19.2¢	17.5¢
Finished steel, index (U. S. Dept. of Labor BLS, 1947-49 = 100).....	144.8	144.8	1144.8	140.8	1176.4
Scrap steel composite (Iron Age, ton).....	\$34.33	\$34.67	\$36.00	\$28.08	\$20.27
Copper (electrolytic, Connecticut Valley, E&MJ, lb.).....	36.000¢	36.000¢	36.000¢	30.000¢	14.045¢
Wheat (No. 2, hard and dark hard winter, Kansas City, bu.).....	\$2.54	\$2.50	\$2.46	\$2.34	\$1.97
Cotton, daily price (middling, ten designated markets, lb.).....	33.98¢	33.92¢	33.49¢	34.47¢	30.56¢
Wool tops (Boston, lb.).....	\$1.95	\$2.00	\$2.00	\$2.12	\$1.51

FINANCE

90 stocks, price index (Standard & Poor's).....	295.3	300.0	302.6	228.3	135.7
Medium grade corporate bond yield (Baa issues, Moody's).....	3.50%	3.50%	3.48%	3.47%	3.05%
Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate).....	2-2½%	2-2½%	1½-2½%	1½-1½%	3-1%

BANKING (Millions of dollars)

Demand deposits adjusted, reporting member banks.....	56,234	55,981	55,349	54,153	1145,820
Total loans and investments, reporting member banks.....	84,214	84,464	84,898	78,794	1171,916
Commercial and agricultural loans, reporting member banks.....	22,721	22,607	122,543	22,045	119,299
U. S. gov't guaranteed obligations held, reporting member banks.....	33,395	33,571	34,096	31,994	1149,879
Total federal reserve credit outstanding.....	24,924	124,971	125,159	125,379	23,883

MONTHLY FIGURES OF THE WEEK

MONTHLY FIGURES OF THE WEEK		Latest Month	Preceding Month	Year Ago	1946 Average
Bank debits (in millions).....	April.....	\$158,289	\$178,917	\$154,759	11585,577
Exports (in millions).....	March.....	\$1,341	\$1,232	\$1,126	\$812
Imports (in millions).....	March.....	\$1,019	\$850	\$862	\$412

* Preliminary, week ended May 14, 1955.
† Revised.

†† Estimate.
‡ Weekly averages. See page 54.

§ Date for "Latest Week" on each series on request.

in BUSINESS this WEEK...

GENERAL BUSINESS:

BUSINESS ISN'T LEANING ON IT. Nation's executives feel business is not seriously dependent on munitions spending, fear no shock if international tensions easep. 27

INDUSTRY EYES THE BUDDING SCIENTIST ... at National Science Fair in hope of lining up promising youngsters for jobs later on.....p. 28

LOOKING AT TAX EFFECTS ... on business and the consumer is job Rep. Mills' House-Senate sub-

committee is undertaking.....p. 30

TRUSTBUSTERS GET HOTTER. GOP's Barnes is as tough an antitrust as Democrat Celler.....p. 31

FTC SHOWS ITS SCORECARD ... by releasing report on who's merging, how and why.....p. 33

QUIET AT LAST ... at Ward's after Wolfson lets off steam and Avery storms out.....p. 34

Business Briefsp. 36

BUSINESS ABROAD:

NATO: WHERE DO YOU GO FROM A POSITION OF STRENGTH? Alliance reaches its peak with West Germany's addition—and faces the new situation it was designed to createp. 149

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General Traffic Manager Douglas Dawson of Norton Company tells

"How Norton makes the sparks fly!"

"When a plant's grinding operations break down, their production lines may grind to a halt, too. *We* have to make the sparks fly!" says Doug Dawson.

"The abrasive that can meet specifications — and *gets there first* — gets the order.

"We win those races time after time from our one big plant in Worcester, Mass.

"How? With on-the-ball engineering — and Air Express!

To us, Air Express is like a full warehouse in every community; we can deliver anywhere in the U.S. in a few hours.

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"Those savings add up when you ship as much as 1,000 pounds a day by Air Express, as we do!"



Air Express

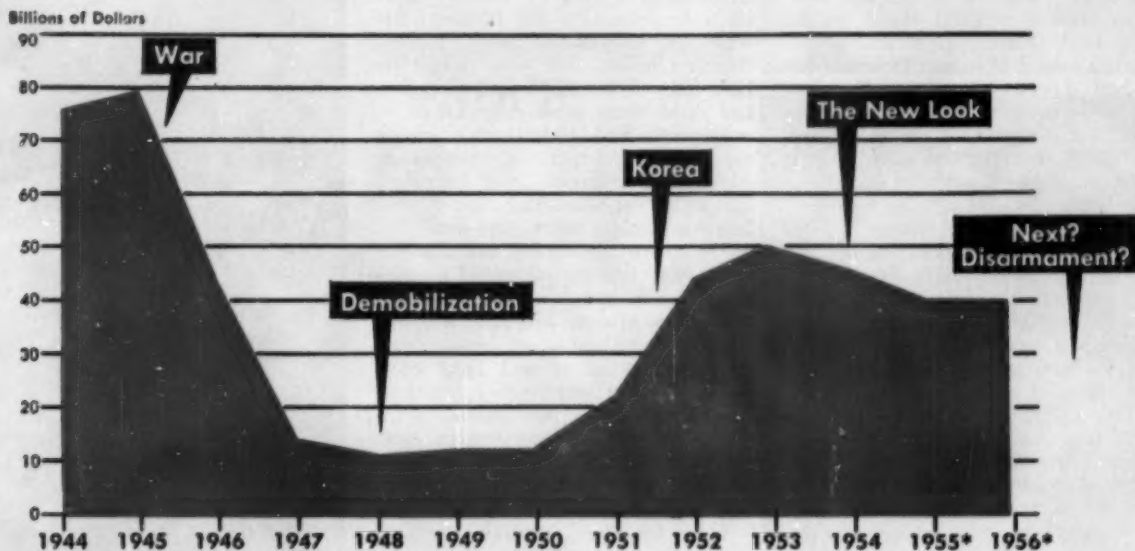


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Spending for Defense

Total National Security Spending Includes Defense Dept., Foreign Military Aid, Atomic energy, Stockpiling, etc.



Data: Dept. of Defense.

* Estimate

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PEACE HOPES MIGHT SHRINK SPENDING, BUT . . .

Business Isn't Leaning on It

For years, the world has had to live with cold war—and U.S. business has geared itself to live with what military men have warned might be fifty years of semi-mobilization.

Suddenly business faces a new question:

Is the cold war tension easing—and if it is, will an economy geared to permanent high-level defense spending have the rug pulled out from under it?

The week's news raises the possibility. Germany is again independent. Austria has a peace treaty after the Russians have fought against it for years. A conference "at the summit" is in the offing. Pres. Eisenhower has voiced the cautious hope that "a new dawn may be coming, even if the sun rises very slowly."

Even so, the prospect isn't scaring businessmen.

BUSINESS WEEK reporters asked businessmen across the country if they feared the adjustments that would have to be made in a defense economy if tension really relaxes. The answers can perhaps best be summarized this way: "We're skeptical. We're not scared."

• **Peacetime Prosperity**—An executive of an Eastern electrical controls firm expressed the most common viewpoint in these words:

"I'll believe it when I see it. Right now international peace seems too far ahead to think about."

But, he says, if it should come "it won't make much difference one way or another. There'll probably be a decrease in defense spending—but defense business has been low for us for some time anyway. Reduction of taxes is a possibility—and that's always good for business. After a slight bump downward,

we'll start on the march up again. Postwar prosperity is petering out now and we're on the verge of peacetime prosperity."

His thinking reflects the controlling economic facts:

• In today's \$370-billion U.S. economy, national security expenditures have lost some of their crucial importance as props of the economy. The military program has dwindled to where it accounts for only about 10% of the U.S. gross national product. Other programs—atomic, stockpiling, foreign aid—boost the figure a couple of percentage points. But the total is a much smaller share of the U.S.' economic activity now than it was three years ago.

• It's civilian business that is putting steam into the economy. Says a Federal Reserve economist: "If you're going to have an easing of tensions and

less defense business, it couldn't come at a better time." A Boston manufacturer adds: "I'm more interested in what autos do than in defense business." An executive of a company that has seen its defense sales cut more than half by recent military cutbacks put the same thought in another way: "We think that we've taken the bump already."

• **Limits**—The thought has echoes in Washington, where few in the Pentagon or on Capitol Hill see any big reductions in military spending looming up. The cutbacks of the "new look" are part of a program aimed for the long haul. Pentagon officials like to quote a remark of former Defense Secy. Robert Lovett when the Kremlin's peace doves were cooing three years ago. "I don't want to take off my overcoat every time the sun comes out in Moscow, and then put it on again when it gets cold."

But if you want to assume that the Reds really mean it this time and are prepared to go all-out to show it, any military cutback on our part would still be very gradual.

Just last week, the House voted a \$31.4-billion military budget for fiscal 1956.

The Eisenhower program calls for stabilizing military expenditures at about \$34-billion a year for five years or so. A good chunk of the budget is tied to the size of the force—for fiscal 1956, \$18.1-billion is tied up in personnel costs, operations and maintenance expenses. Hardgoods procurement takes another \$12.7-billion, the bulk for aircraft and increasing amounts for guided missiles. Relaxing tensions might slice these down, but it would be a guarded, slow decline. Only military construction, now running at about \$1.5-billion, could dip sharply.

• **A Stampede?**—The one thing, Washington fears, that might upset this prospect would be a sudden and sharp swing in the psychology of the American people—a stampede. As one general puts it, "Americans might get it in their minds that peace is here to stay—as they did in 1946. When that happens," he adds, "we don't only demobilize. We fall apart."

BUSINESS WEEK's sounding of attitudes across the country showed no evidence that anyone wanted to see the U.S. drop its military guard.

• **More of the Same**—By and large businessmen subscribe to the Washington view that nothing will happen fast enough to make much difference to the defense program or to give industry as a whole any real jolt.

"It might mean some revision of military orders, but so what?" says a big electronics man in New England. "We've seen gradual cutbacks anyway." The Chicago version is, "From the

standpoint of being wrung out, we've been wrung."

• **How Important?**—A lot of businessmen shrug off the effect of defense cutbacks in any case. Even though one Milwaukee company looks for 10% to 15% of its volume to be in modern weapon production, its general manager says this "isn't vital enough to us to upset the apple cart."

The auto capital, Detroit, isn't worried. Its defense business has been dropping off for two years. It sees a return to a more stable international situation as having no marked effect on auto sales. As for housing, the second big prop of this spring's pickup, there's a feeling that peace might relieve fears of the 25-35 year age group and make them more eager buyers.

• **Dissents**—The chorus isn't unanimous. Here and there are businessmen who aren't concerned about their own companies but who think that defense business is still a pretty good-sized slice of the country's economy, and that any appreciable tapering off would give industry a jolt, if only a short-term one.

• **Western Arsenal**—And in at least one area—the Far West—many businessmen feel local industries and local companies would really take it on the chin. In this center of "new munitions industry"—aircraft, guided missiles, and electronics—you hear talk of "havoc" from any drastic cutback and of "folding up our tents."

There are also companies in other areas who have geared themselves tightly to defense and who foresee trouble. Take the case of a Midwestern defense supplier, with 90% of its production now going to defense. Its engineers don't think in terms of mass civilian production, and after three years' study it hasn't been able to come up with any diversified civilian products that fit into its setup.

• **Market Jitters**—If you try, you can find evidence of a "peace scare" in falling stock market prices (page 176) of aircrafts and such stocks as General Dynamics and Bath Iron Works. It's a factor, of course, but a deeper look turns up other factors at work—notably, in the case of aircrafts, the prospect of contract renegotiation. And the drop has hit other stocks that can't be put in the "war" category.

• **Peace Bulls**—Talking with businessmen, too, brings out a lot of bullishness about peace, much of it in high places. The head of a big machinery and equipment manufacturing company calls war gains a "fantasy," says: "Your real gains are made in building to a higher standard of living." National Steel's Ernest T. Weir doesn't see even a short-term dip, and believes a shift to a more peaceful world atmosphere would boost U.S. industry's capital spending.



TEEN-AGE EXHIBITORS at National Science

Industry Eyes

Last week, representatives of northern Ohio companies swarmed into Case Institute of Technology in Cleveland to see how the upcoming generation will cope with the scientific problems of tomorrow.

The occasion was the Sixth National Science Fair, where 136 junior and senior high school students showed models or detailed drawings of their research into such fields as the principles of electromagnetic balance, the effect of pregnancy on mammary cancer, and a fifth dimensional analogue of a binomial cube.

The representatives came not to scoff at the teen-age prodigies, but as talent scouts to line up promising youngsters who later might fit into their companies. Many of them made an outright



Fair draw the management crowd as . . .

the Budding Scientist

bid for the exhibitor's interest, but the more cagey approach was to find out in what school of higher education the youth could be contacted in, say, two or three years. Some Cleveland companies even offered scholarships for continued study of a student's project.

The National Science Fair is the showcase of Science Clubs of America, an offshoot of Science Service, Inc., and had its start in 1941. Science Service was started in 1921 by newspaperman E. W. Scripps as a nonprofit organization for the dissemination of scientific news and information.

Science Clubs of America succeeded the teen-age science fairs that had been conducted by the American Institute of the City of New York during the 1930s. Later, Science Service, which

is heavily endowed, took over the clubs.

To compete in the National Science Fair, high school youths must first win on a local club basis. The winners exhibit at a regional fair, then participate on a national basis. Exhibits are restricted to two broad categories: physical science and biological science. At the local club level, exhibitors range upward from the 7th to the 12th grades, but in the nationals, exhibitors are limited to the 10th, 11th, and 12th grades.

Accompanying the entrant to the nation fair, with all expenses paid, is the exhibitor's science teacher and a representative from the sponsoring agent—usually a civic club such as the Kiwanis, a local newspaper, industrial company, or technical society.



EXHIBITORS: Robert Shantz (top) shows his home-constructed betatron; Lawrence Chrietberg (center) explains his own method of electroplating; and Robert Belenger demonstrates photomicrography.



REP. WILBUR MILLS heads Congress subcommittee that's starting a long job of . . .

Looking At Tax Effects

The idea is to find out how changed rates affect the growth of business. So far, the effort's bipartisan.

The way that taxes influence businessmen and consumers is in for a searching new inquiry in Washington, starting next week.

Everything from what makes a corporation launch a multimillion-dollar investment program, to the purchase of a bottle of whiskey, is involved.

• **Effect on Business**—The new investigation may turn out to be the first ever in which the leaders of both parties try to find out what happens to the economy as a whole when tax rates are jiggled. The difference is this: In the past, Congressional tax studies concentrated largely on what happened to government's dollar income when individual rates were raised or lowered. This time the idea is to concentrate completely on the impact of tax rate changes on business growth.

The study is being made by a subcommittee of the Joint Committee on

the Economic Report, rather than the House Ways & Means Committee, which traditionally handles tax matters. Its purpose is not to recommend specific revenue measures. That is still the prerogative of Ways & Means. Instead its sponsors hope to find answers to basic questions that have always bothered members of both parties when either tax increases or tax cuts are ahead.

• **Ammunition**—Democrats are in charge—and in view of the sure-fire political wrangling over tax cuts next year, the study might well have been stamped a partisan maneuver, to allow Democrats to get to the voter first with the most.

But leaders of both parties have managed to avoid this—at least so far. Republicans as well as Democrats insist the study will be non-political—no matter how politicians of both parties

may use the findings when the shooting starts in 1956.

What Congressional leaders hope is that fresh answers will be offered for such bothersome tax questions as these:

- How should the tax cuts—which Congress confidently expects 'to vote next year—be distributed for the greatest long-run good of the economy?

- What is the best economic argument that can be made for the Republican theory of stimulating the economy by stimulating investment?

- What is the best argument that can be made—again on economic grounds—for cutting the personal income tax in preference to stimulating investment? This has been a frequent proposal of Democrats for the past two years.

- Is it possible to draw up a federal sales tax that would not be a deterrent to rising living standards and economic growth?

- Does the present capital gains setup provide sufficient financial resources for continued business growth?

- How is the new tax depreciation policy, as spelled out in the revenue act of 1954, affecting capital outlays—particularly by new and small businesses?

- Should the present depletion allowances granted the oil and mining industries be changed?

- Is the present tax treatment of deferred compensation adversely affecting the mobility of key executive personnel?

Emphasis will be on the economic consequences of taxation—not on immediate revenue needs to balance next year's budget. Backers of the study believe it will guide Congressional thinking for years to come on problems that—as one committee member put it—"we just never had the time to really look at."

- **In December**—Hearings will be held, and background studies published, next December—just ahead of whatever tax proposals Pres. Eisenhower sends to Congress with his annual budget message in January.

Subcommittee members also hope they can agree on a set of specific recommendations. If they can, the stage will be set for a new look at the tax law, as far-reaching—in its way—as the one engineered last year by Rep. Daniel A. Reed, then Ways & Means chairman.

I. Mills Is the Key Man

Whether these hopes are realized depends largely on the diplomatic skill of Rep. Wilbur D. Mills, chairman of the subcommittee, and a rising star among Congressional tax authorities.

His fellow Democrats on the committee—Sen. Paul Douglas (Ill.) and Sen. Joseph C. O'Mahoney (Wyo.)—

both lean to the consumption-first tax philosophy; they'd like to see personal income taxes cut more than business taxes.

Republican members are Sen. Barry M. Goldwater (Ariz.) and Rep. Thomas B. Curtis (Mo.). Goldwater's emphasis is on stimulating investment. Curtis has been a firm supporter of Republican tax policies, but may find himself—like Mills—between the two extremes.

Mills opens the study with a big advantage: he has solid Democratic backing. In addition, he is trusted and admired by Republicans—Goldwater and Curtis in particular.

Bipartisan confidence in Mills—a ruddy, 46-year-old, Harvard-trained lawyer from Arkansas—stems largely from his 13 years of experience as a member of the Ways & Means Committee.

Mills is best known for the plan he proposed in 1950 to speed up the collection of corporation income taxes, under which half a corporation's tax liability for one year is paid in the following March, and half in June. Last year he supported the Treasury's request that corporation taxes be speeded up even more—one payment in September and another in December on the current year's estimated liability.

II. Panel Approach

For his new job, Mills has adopted the "panel of experts" approach, used many times by the Joint Committee on the Economic Report. He and Curtis have taken the lead in selecting panel members with the help of Grover Ensley, staff director.

The study itself has been assigned to Norman B. Ture, who resigned from the Treasury's tax advisory staff to take the job. Ture served successfully under the Republican tax chiefs in the Treasury—another indication that Mills and the committee hope to keep the inquiry from turning into a partisan forum.

• **Assignments**—The plan is to bring the experts to Washington next Tuesday for assignment of specific subjects. Each will have until October to do original research. In December, they will be recalled to Washington for hearings, after which their reports will be published. Recommendations by the subcommittee will follow, if it can reach agreement.

The panel members—still being enlisted by telephone—will include business, labor, and university economists, along with tax lawyers and accountants. The Internal Revenue Service will be represented; Curtis, who wants to know whether liquor taxes have reached the point of diminishing returns, thinks a professional tax collector may have the best answer to that one.



REP EMANUEL CELLER'S hearings on antitrust law reveal that . . .

Trustbusters Get Hotter

It's harder to tell which side wants to make it rougher for antitrust violators—Administration or Democrats.

The Republican Administration's chief antitrust enforcement officer this week spent long hours testifying from the witness stand before the hottest antitrust spokesman in the Democratic Congress.

And when it was over you could come to this one sure conclusion about the two men: It's getting harder to tell which is more anxious to make things rougher for businessmen who get into trouble with the antitrust laws.

When Democratic Rep. Emanuel Celler opened the New York hearings of his House Judiciary Subcommittee on the Administration's enforcement of antitrust laws, he had two main objectives:

- To develop campaign material against the Republicans, mainly by challenging the recommendations of Atty. Gen. Brownell's National Committee to Study the Antitrust Laws.

- To pick up any antitrust subject that might seem "hot," and run with it.

When Stanley N. Barnes, chief of the Antitrust Div. of the Justice Dept., went into the witness stand, he had an answer for just about every Democratic thrust designed to find shortcomings in the Eisenhower-Brownell antitrust prosecution record.

- **Cases by the Score**—Barnes told the committee that he filed a total of 20 antitrust cases up to May 12 this year, and he estimated that about 20 more will be filed by June 30.

To make those figures more meaningful, Barnes said that in the last full fiscal year (1952) under the Truman Administration, 30 antitrust cases were filed and in the first half of fiscal 1953 the Democrats filed five cases. The Republicans in their first six months in office, filed 27 cases. Barnes said that last year he filed a total of 35 new cases;

23 of them civil cases, the others criminal.

And as for following up the courts' decisions, Barnes disclosed that the Justice Dept. is making a special effort to check how well companies are living up to decrees ending antitrust violations.

I. Pattern of Mergers

On merger matters, Barnes gave this run-down of examinations made by the Justice Dept. after companies planning mergers voluntarily put their proposals before the department:

In 1953, seven merger plans were studied by the Justice Dept. Of these, five were given clearance to go ahead, one was denied clearance, and one was abandoned by the company.

In 1954, 12 plans were studied. Of these, seven were given clearance, four were abandoned, and one was denied.

So far, in 1955, 10 merger plans have been considered. Three have been cleared, three abandoned, two denied, and two are still under study.

• **Bethlehem-Youngstown Talk**—Celler pressed Barnes with questions on what's brewing in the still-smouldering merger between Bethlehem Steel Co. and Youngstown Sheet & Tube Co. What Celler particularly wanted to know were the latest developments in recent rumors that Bethlehem was buying and holding large blocks of stock in Cleveland-Cliffs Iron Co., which, in turn, holds a substantial share of Youngstown stock.

Barnes, who has been in touch with another Democrat—Sen. Paul Douglas, of Ill.—on this subject, said the ultimate test would be what use the acquiring company made of the stock. If the acquisition were purely for investment and no attempt were made to influence the operation of another company through acquired stock, it may be legal.

• **Aiming at Banks**—Proposals to bring the 1950 antimerger law to bear on banks that merge by buying up a competitor's assets—as well as stock acquisitions—are being seriously considered. Celler already has introduced a bill to do this. Barnes told the committee his division only recently concluded that it doesn't have jurisdiction over asset acquisitions by banks under the 1950 law. And he made it clear he'd like to be able to apply the law to banks.

Barnes also recommended to the committee proposals to amend the merger law by requiring companies to give pre-merger notification to the Justice Dept. and the Federal Trade Commission. He would need this notification early enough, he said, to give his staff a chance to dig into the facts submitted—and warn against any proposed merger it thinks is suspect. But he also wants the government to retain the

right it now has to challenge a merger after it is completed, even though the government does not act during the pre-merger notification period.

Celler queried Barnes about proposals to change the law so that no company with a certain percentage of an industry's market could expand through merger. Barnes opposed putting a definite volume ceiling into the law but he indicated that some kind of measure ought to be given in an amendment so that very small firms would be free to merge even though their merger would not substantially affect competition.

II. Probing for Monopolies

The big monopoly suit that the Truman Administration filed against American Telephone & Telegraph Co., in 1949, seeking to divest Western Electric Co., Inc., from AT&T, is not being dropped.

Barnes said he has been seeking settlement of the AT&T case by consent judgment. Since the beginning of the year, he has spent 15 days in top-level negotiations considering a settlement. But the Antitrust Div. is still preparing for trial should negotiations break down. He said he thought AT&T's practice of requiring its operating companies to buy almost all their telephone equipment from Western Electric violated the antitrust laws and that if he did not feel that way, "I would have dropped the case when I reviewed it in 1953."

• **Eyes on Detroit**—Both Barnes and the Celler committee appear anxious to establish some kind of record in the automobile industry.

Barnes himself told the committee that the long-pending investigation of certain practices in the automobile industry is still going on. He was short on details but confirmed that at least eight different phases of the industry are under study, including exclusive dealing contracts that require dealers to sell only one make of car and replacement parts. Although pressed for details by Celler and committee counsel Herbert N. Maletz, Barnes would say only that he wasn't satisfied that such exclusive dealing contracts do not violate the law.

III. More Rate Cases?

Discussion of the antitrust suit against American Newspaper Publishers Assn., American Assn. of Advertising Agencies, and four other publishing associations, opened up another area where Barnes indicated he is taking new action.

The ANPA suit, he said, basically attacks two things: (1) the alleged fixing of ad agency commission rates at 15%

of a publisher's gross rate for advertising, and (2) the so-called "recognition system," by which publishers police standards for ad agencies and boycott unrecognized agencies.

Celler wanted to know if Barnes was looking into other commission rate questions—specifically brokerage fees in the New York Cotton Exchange and the Chicago Board of Trade, neither of which is regulated by the Securities & Exchange Commission.

Barnes said the matter of commission rates and fees is getting antitrust attention "not only in regard to brokers' fees, but other areas that I cannot talk about now."

Then he added: "I have prepared a draft of a complaint that tests the fixing of fees in another area which has not yet been subjected to antitrust prosecution." This left committee members hanging on the hook, but Barnes would not elaborate. However, he did tell reporters he had not meant to connect this with Celler's question about the Cotton Exchange or the Board of Trade.

IV. What Next?

Several witnesses have come up with suggestions on what the committee might do next. These range from proposals to tighten the present antimerger law, to repeal federal fair trade laws, and to study the operations of leading patent pools.

Already there are hints that the Democrats may employ the technique used during the antitrust probe made by the Temporary National Economic Committee in the 1930s and 1940s—commissioning experts to prepare monographs on antitrust subjects picked by Congressional committees.

Whatever alleys the Celler committee may enter, it's fairly certain that no new legislation will result, at least in this session of Congress. The committees began their work too late in the session to come up with any well-defined legislative proposals that could be considered before adjournment. The major areas where new action has been proposed—in merger and in fair-trade—are too complicated and politically controversial for any quick action.

Two antitrust bills—not produced by the current hearings—already have been passed by the House this year. One raises the fine for a Sherman Act antitrust violation to \$50,000, the other permits the government to sue an antitrust violator for damages and puts a uniform statute of limitations on civil antitrust actions. Even here, Senate action is by no means assured. Both proposals are still in the Senate Judiciary Committee where proposals to boost the antitrust fine have bogged down before.

Mergers: Here's What Happened . . .

in 1,773 mergers in mining and manufacturing . . .

(1948-1954)

These were the main fields:

Industry Group	Number of Acquiring Concerns	Number of Concerns Acquired
Machinery (nonelectrical)	166	249
Food and kindred products	100	243
Chemicals	73	168
Fabricated metals	91	161
Transportation equipment	66	125
Textiles and apparel	74	117
Electrical machinery	70	111
Mining	48	81
Primary metals	53	78
Stone, clay and glass products	39	70

These were the main reasons for merging:

Add to total capacity	40%
Add to capacity in a specific area	10%
Product diversification	25%
Gain source of supply	12.5%
Move into consumer market	10%

These companies acquired more than five others:

Company	Number of Acquisitions
Foremost Dairies, Inc.	48
Olin-Mathieson Chemical Corp.	18
Borden Co.	17
Food Machinery & Chemical Corp.	14
H. K. Porter, Inc.	13
Burlington Mills Corp.	12
American-Marietta Co.	12
American Machine & Foundry Co.	11
Ekco Products Co.	10
Pressed Steel Car Co., Inc.	8
National Dairy Products Corp.	8
McGraw Electric Co.	8
Allied Chemical & Dye Corp.	7
National Lead Co.	7
Textron, Inc.	7
General Shoe Corp.	7
Continental Can Co. Inc.	7
Maremont Automotive Products, Inc.	6
Merritt-Chapman & Scott Corp.	6
H & B American Machine Co.	6
General Tire & Rubber Co.	6
Koppers Co., Inc.	6
International Minerals & Chemical Corp.	6
Airline Foods Corp.	6

FTC Shows Its Scorecard

Out of Washington this week came what's probably the most complete batch of facts and figures yet assembled on the recent surge in mergers.

The Federal Trade Commission's Bureau of Economics, working almost entirely from data in FTC files, published an exhaustive economic report that tries to answer the question of who is merging, and how, and why (table above).

• **The Facts**—In brief, FTC's study concludes that mergers:

• Increased in 1954 to three times the 1949 rate.

• Are nearing the postwar peaks of 1946-47.

• But are still well below the pre-depression rate of the late 1920s.

• **The Questions**—However, the report hews to an almost completely neutral line on the two questions most often asked by people who have been alarmed by the postwar merger trend:

• Are many of the current mergers illegal—or should they be?

• If so, what should be done about them?

The commission may have some answers to these questions. But its report gives no hint of drastic recommendations to come. Basically, it indicates satisfaction with the authority and procedures FTC now uses to enforce the merger laws. For instance, on the subject of why companies merge, the report says that the underlying "economic forces and motives are not, per se, different from those upon which

all business judgments are based, respecting ownership and exchange of property in a free economy."

FTC Chmn. Edward F. Howrey says the report "turns a factual searchlight on an economic problem that has been obscured by lack of current information."

The Justice Dept. Antitrust Div.'s proposals for dealing with mergers, which are currently being presented at hearings on Capitol Hill (see page 31), go much further than anything discussed in the report.

The 233-page document of text and charts, prepared over the last four months under the direction of FTC economist Jesse W. Markham, contains two major statistical studies.

The first covers 1948 to 1954. In that period FTC counted 1,773 mergers and acquisitions in the manufacturing and mining fields. Nearly two-thirds of the acquiring companies had assets of \$10-million or more. By contrast, companies with assets of less than \$1-million made less than 8% of the companies (table, page 33).

The 1948-54 study breaks down the mergers by industries, lists 24 companies that each acquired six or more companies (see table, page 33).

The second major study covers about 2,100 mergers recorded by FTC in the 43 months since the 1950 amendment to the antimerger law went on the statute books. A total of 1,350 companies made acquisitions, about 1,000 of them each acquiring one other company. But 46 companies, the report says, each made five or more acquisitions—and they accounted for a sixth of all the mergers recorded by FTC since the 1950 law was passed.

This study also attempted an analysis of the various competitive advantages that an acquiring company might gain through a merger. By far the most frequent was additional capacity to meet the demands of a market already supplied by the acquiring company. As in other areas of the report, no hint is given that this particular fact may be significant cause for concern.

In fact, FTC discusses four other reasons why companies merge, and they are not competitive factors: (1) inability of smaller companies to command financial resources for expansion and modernization, (2) surplus cash in the hands of the acquiring companies, (3) aging owners who want to retire or adjust estates, and (4) tax savings under provisions of the Internal Revenue Act that grant more favorable rates on capital gains, tax free exchanges of stock, and tax advantages gained by carrying forward past operating losses as credits against future earnings.

Other features that will make interesting reading are case studies of the economic factors involved in particu-

lar recent mergers. Among the companies getting attention on this score are Consolidated Foods Corp., Avco Mfg. Corp., and Burlington Mills Corp.

Many other mergers or acquisitions are discussed in other parts of the report, including: General Foods Corp.-Perkins Product Co.; International Shoe Co.-Florsheim; National Dairy Products Corp.-United Dairy Farms of Albany, Inc.; Allied Stores Corp.-Stern Bros.; Chrysler Corp.-Briggs Mfg. Co.; and Philip Morris & Co., Inc.-Benson & Hedges.

• **Rundown on the Act**—The report analyzes the 1950 antimerger act, and the six cases brought by FTC and the Justice Dept. to challenge mergers. It reviews the difficult legal and economic problems involved in deciding whether a merger "may substantially lessen competition, or tend to create a monopoly." On this, the report says the competitive consequences "cannot be established merely by the fact of merger itself but must rest on: (1) the character of the companies involved, (2) the markets affected, and (3) immediate changes made in the acquiring company, and the adjustments of other companies that are operating in the markets.

According to the study, any merger that substantially reduces the opportunity or the incentive of sellers or buyers to enter new markets, to experiment with new channels of distribution, or to exercise choice among products and prices, will substantially lessen competition. At the same time, the report recognizes that all the facets cannot and need not be investigated by FTC to decide a case.

"Data to provide absolute certainty as to competitive consequences would nullify the words 'where the effect may be' in the 1950 antimerger law, and convert them into 'where the effect is,'" the report concludes.

When it moves around to discussing the subject of how FTC can carry out its job of enforcing the antimerger law the report dismisses proposals to require companies to report acquisitions. This would impose too heavy a reporting burden on business, and too heavy a processing burden on FTC, the report says.

It generally endorses present FTC technique in recording all mergers reported in newspapers and trade journals, and those proposed mergers voluntarily brought to FTC's attention by the companies involved, and then screening the files to find those that are most significant.

FTC anticipated this part of the report last April, when it set up a special task force to draft new ways to speed the merger screening process and to ride herd on all FTC's antimerger matters.

Quiet At Last . . .

. . . at Ward's after an angry Saturday meeting where Louis Wolfson glowers and Sewell Avery storms out.

John A. Barr, the new chairman of Montgomery Ward (BW-May 14 '55, p30), also moved in for a one-year term as president this week—even though new board member Louis E. Wolfson argued that a merchandising man would make a better president.

At the same Saturday meeting, former chairman Sewell Avery stormed out, his personal attorney John MacLeish puffing along behind him.

Avery was angered at the board for streamlining Ward's executive committee by cutting its membership from five directors to three—and dealing him out in the reshuffle. Executive committee seats went to Barr, C. H. Shaver, and Philip R. Clarke, the committee chairman.

Both Wolfson and Avery were annoyed that the plan was sprung on them at the meeting—and that a news release naming the three committee members had been prepared in advance and was handed out immediately after the meeting.

• **Unnamed Candidates**—Wolfson was noticeably irked when the presidency was turned over to Barr. He said: "If they don't have any ideas for a president, we've got some suggestions." But he didn't mention any names.

Though he has expressed a generally high opinion of Barr, Wolfson has said several times that he doesn't think Barr is qualified for the presidency. Wolfson insists he has no plans for another proxy fight; he's leaving the door open, however, by maintaining a "wait and see" attitude toward Barr.

• **Quiet on Home Front**—Ward's next board meeting is scheduled for May 27. The three new board members—Wolfson, Alexander Rittmaster III, and Bernice FitzGibbon—will be there. It will be the quarterly dividend meeting. No fireworks are expected. Wolfson intends to hold off on criticism for a while—though some of his own people don't agree with that strategy.

So, with a spell of comparative quiet expected—at least for a short time—in Ward's boardroom, it seems the next chapter for Ward's may be written by the Senate Banking & Currency Committee hearings next week, at which proxy battles are an agenda item. Barr is expected to appear before the committee. Wolfson and his associates plan to attend. But Avery isn't likely to be there.

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BUSINESS BRIEFS

Too many carriers? The ICC will start an inquiry on July 12 into the purchase of the Waterman Steamship Corp. by the Malcom P. McLean trucking interests (BW—May 14 '55, p34). ICC says it would be a violation of its rules if McLean controlled more than one carrier without permission. Before buying control of Waterman, McLean placed his controlling shares of McLean Trucking Co. in trust.

A balanced cash budget for the U.S. in the fiscal year beginning in July was predicted by Robert B. Blyth, assistant to the Treasury Secretary. Blyth also told the National Assn. of Mutual Savings Banks that the government will probably need about \$9.6-billion in new money in second-half 1955.

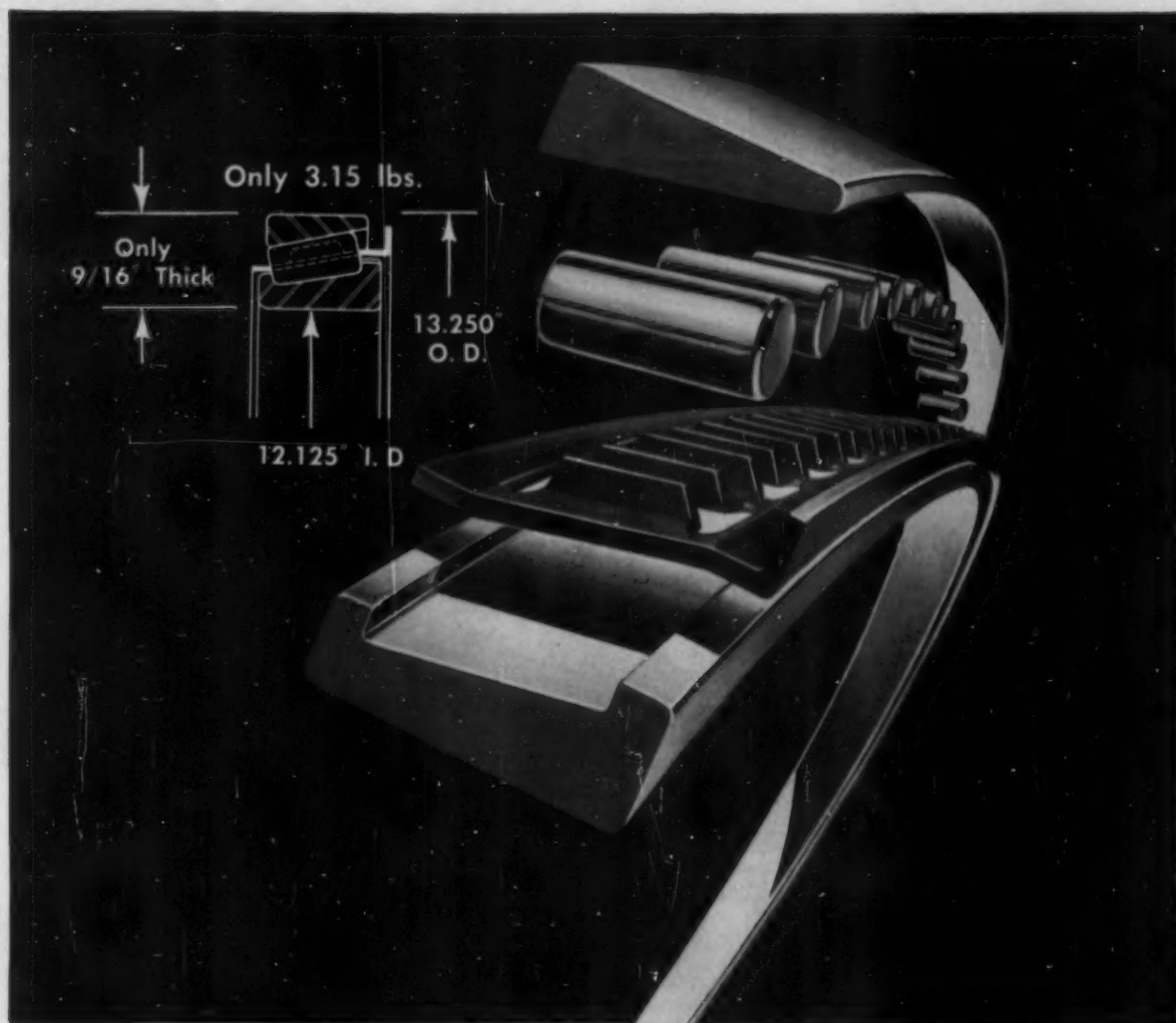
Wedding bells in the corporate air: Burroughs Corp., Detroit office equipment maker, wants to buy Todd Co., Inc., Rochester manufacturer of bank-paper protective devices. Todd shareholders will decide on June 3. . . . Tectron American, Inc., still busily diversifying, is trying to buy Brown & Bigelow, major calendar maker, via an exchange of stock.

"Limited edition" cars are spreading. Packard has entered the field with a \$5,932 sports convertible, the Caribbean. Fewer than 1,000 will be built.

Economic indicators reported by government sources: April industrial production maintained its March index of 137 compared with the 1947-1949 average. That's a single point below the record, set in March, 1953, and 10% above April a year ago. . . . Last year U.S. citizens saved \$11.7-billion, boosting their combined bank balances, insurance, securities, and S&L accounts to \$588.4-billion.

Oleo by any other name smells bad to the Federal Trade Commission. FTC has ordered two makers of margarine to stop using advertising language that evokes the old-fashioned bossy-cow dairy. The offenders: E. F. Drew & Co., of New York, and Reddi-Spread Corp., Philadelphia. Targets of the commission's ire included "creamy," and "our other dairy products."

Sheraton Corp. of America is dickering for three Chicago hotels—the Sherman, Ambassador East, and Ambassador West—according to Ernest Henderson, Sheraton president. The three, now under one control, have a total of 2,207 rooms, are said to be worth about \$20-million.



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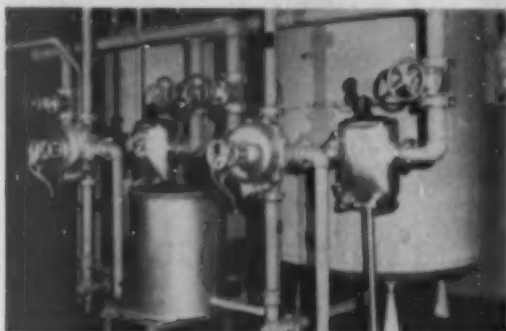


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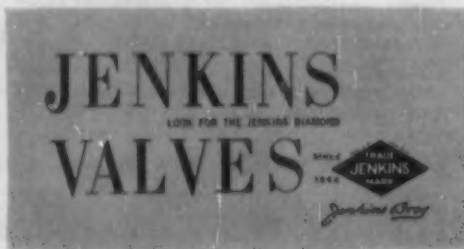
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WASHINGTON OUTLOOK

WASHINGTON
BUREAU
MAY 21, 1955



There's a real stew in Washington over Russia's air progress.

The plain fact is that the U. S. has underestimated the scientific, engineering, and production abilities of the Soviet. Pentagon admission of this threatens to kick off a hot political row at a time when plans are being worked out for new Big Four talks on peace and disarmament. Defense Secy. Wilson, who in the past has been reassuring on the arms race, will be asked by Congress for some explanations.

Here's what Russia has shown the West—and shown it deliberately.

A heavy intercontinental jet bomber, capable of round-trip atom-bomb flights against U. S. targets. Russia wasn't supposed to have these bombers on a production basis—only experimental models. But the Russians are flying them openly in numbers. This plane is comparable to the U. S. B-52—in production, but on a limited scale.

A medium jet bomber, comparable to the Air Force's B-47, which needs refueling for long distance work. And Russia has refueling-type planes.

An all-weather jet fighter, which the Pentagon's cryptic announcement called "expected." For effective use, this fighter needs radar warnings on incoming planes. That it's being produced suggests that Russia has such a warning system. That would make it hard for the old B-36, still the backbone of our strategic airpower, to reach targets. Newer planes would have trouble, too.

There's an even more disturbing angle: The Pentagon's announcement said the Soviets "elected to expose" these new aircraft. The implication is that Russia has even more advanced craft well along, otherwise it would not call attention to these models. Officials say it now is very hard to escape the conclusion that Russia, with A-and-H-bombs developed far ahead of U. S. expectations, is either up with or close to the West in airpower—the means of delivery of the bombs. This means that when the heads of the Big Four nations sit down this summer, Russia will talk from strength.

Congressional armed services committees will investigate. The upshot may be to put more steam behind B-52 production and the development of its successor, which is now under way.

Why did Russia show off her new planes and in numbers that indicate they are in production and not experimental prototypes?

Washington ties the answer into the coming Big Four talks. The big push on the U. S. for talks has come from our European allies, Britain and France. Russia's disclosures make it clear that in any East-West conflict, Moscow not only would be in a position to raid all Europe, but could also strike directly at the U. S., which is the arms-making hub for the whole Western alliance. This is seen as a maneuver to impress the British and French.

A U. S. aim in the pre-talk preliminaries is to develop a common front—a unity with Britain and France that will avoid any Yalta-like situation; when Roosevelt and Churchill failed to agree fully on objectives.

What form might an East-West settlement take, assuming there's good faith on the part of the Reds? Officials frankly don't know. But some of those who take the coming negotiations seriously thumb-twiddle on these lines: Middle Europe might be free and neutralized from the Rhine to the

WASHINGTON OUTLOOK (Continued)

WASHINGTON
BUREAU
MAY 21, 1955

Russian border. This could cost the West the loss of German troops and forward bases. But it would gain Russian withdrawal from Central Europe. Then, if all sides could agree not to try to change Far East frontiers by force, a basis for a disarmament might be reached. As for time, it runs into years.

—•—

Defense Production Act will be extended, probably for two years beyond its June 30 expiration date. Key features:

Priorities for defense contracts—the government's authority to require suppliers to fill defense orders ahead of civilian orders.

Aid in expanding defense facilities, such as loans, loan guarantees and government-guaranteed markets for output of strategic items.

These so-called wartime powers were revived during the Korean conflict and have been retained on the statute books to make sure defense demands are put ahead of other demands on the economy. There's no fight on them.

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Stand-by wage-price controls are something else again.

Defense Mobilizer Flemming wants them, as a permanent part of the law. His position is that government should be in a position to act immediately in case of emergency, without waiting on Congress. But opposition is strong—in Congress, in business, and within some government agencies. Opponents say the President's "inherent" powers give him authority to act in times of emergency and that a peacetime statute isn't necessary. The prospect is that Congress won't vote this stand-by power at this time.

—•—

Accelerated depreciation—fast tax write-off—isn't involved in the Defense Production Act. Authority for the President to approve its use "in the national interest" is a part of the permanent revenue structure. It's still being used to encourage private expansion of plant and facilities in some lines. Example: electric power. It may be used on a broader scale in the future, where growing civilian demands threaten defense supplies.

Faster amortization for steel expansion figures in current speculation.

—•—

Recommendations to get government out of business highlight this week's report by the Hoover Commission (page 121). It's the latest listing of government enterprises, which the commission estimates probably exceed 2,500 in defense alone, with an investment over \$15-billion. You can get a copy. Write: Superintendent of Documents, U.S. Government Printing Office, Washington 25, D. C. Price is 45¢. Ask for the report of the Commission on Organization of the Executive Branch, titled "Business Enterprises."

—•—

Conflicting appraisals of the housing outlook made news this week.

An optimistic short- and long-term appraisal came from directors of the National Assn. of Home Builders, meeting here during the week. Forecast was that the uptrend will continue and that starts, about 1.3-million estimated for this year, would hit some 2-million in the 1960s.

But a note of caution against overbuilding was sounded by some financial men at the Atlantic City meeting of savings bankers. A report on rental housing vacancies, based on a census survey, will be issued during the summer by the Commerce Dept. Aim is to throw some statistical light on the overbuilding debate and indicate future demands.

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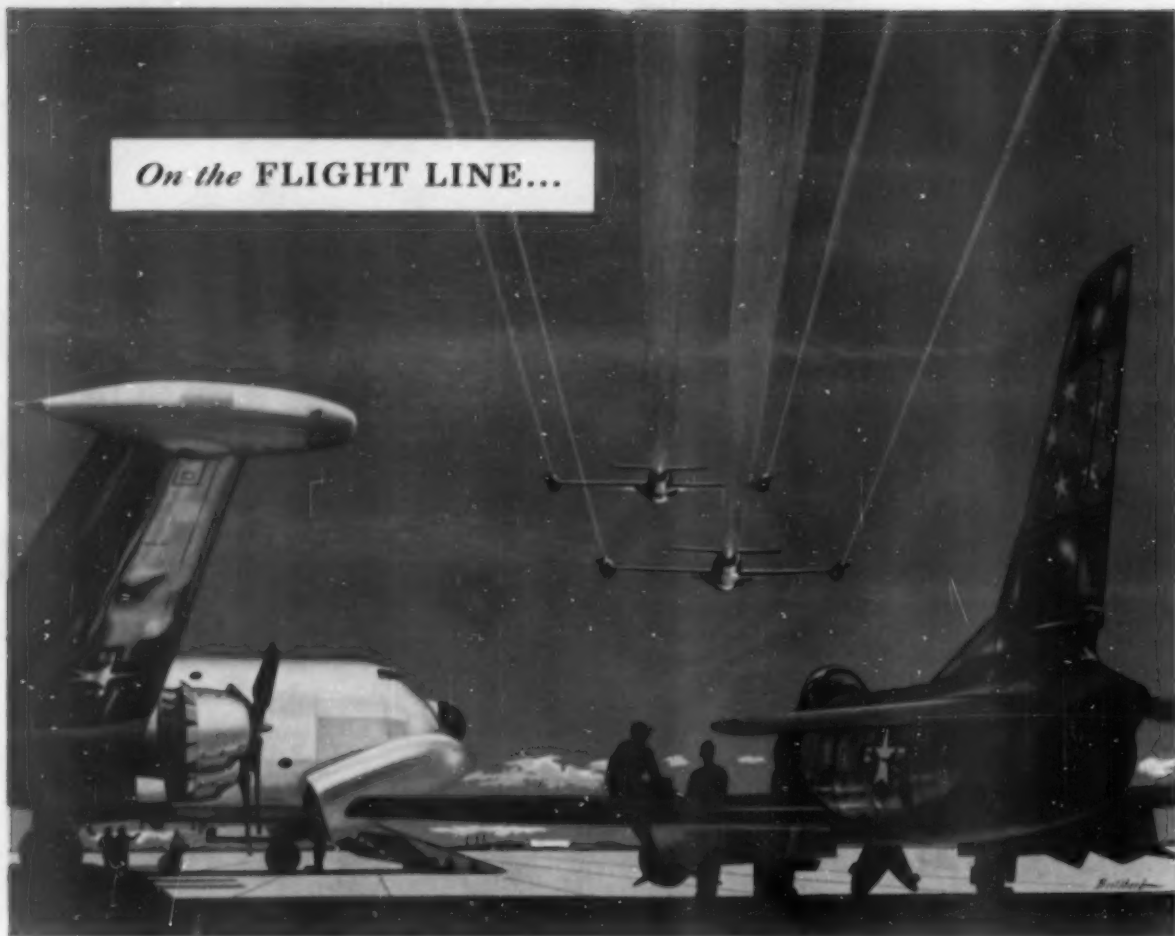
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MANAGEMENT

The Mystery of Executive Talent

● Techniques of science are turned on the question: What makes a good executive?

● Already this year, four major studies have been pushed in attempts to find the answer.

● Unless industry finds answers, the problem will get much tougher in the next 10 years.

Ask almost any executive these days what his chief problems are, and chances are that he will put high on the list the task of finding, developing, and keeping high-grade executives.

Good executives are always at a premium. And when management looks ahead 10 years it sees that premium going up and up. One fact alone is enough to keep management worried: the relative decline of the 25-45 age group in the U.S. population. It's from this group that new management will have to come, and while the proportional size of the group grows smaller, increasing demand for technical men is squeezing this part of the labor market even tighter (page 186).

These are among the reasons for management's continual search for answers to the basic question: What makes a good executive?

• **Search Continues**—Management consultants and faculties of business administration schools have been putting in a lot of work on the question. And their latest reports show that (1) companies are searching more scientifically for a method of finding good executives, and (2) there's still no formula, and much more study and research will have to be done if one is to be found.

So far this year, at least four major probings of the question of what makes a good executive have been going on:

• Richardson, Bellows, Henry & Co., Inc., New York management consultants, are well into a cross-industry study that attempts to pinpoint statistically the characteristics that can be noted early in the career of a successful executive. Some 30 companies are already in the project. More will join.

• Dr. Frederick J. Gaudet, director of the Stevens Institute of Technology's Laboratory of Psychological Studies, has released returns he got from nearly 200 managements in a study of what makes executives fail.

• Harvard's Business History Review gives the results of an intensive analysis of the backgrounds of chair-

men and presidents of big corporations since 1900. This is part of a study by Vassar Economics Prof. Mabel Newcomer.

• Columbia University Press has just published in a book ("What Makes a Good Executive") giving the results of an admittedly subjective look at the whole picture by a round table of experts from business, education, government, and medicine. The round table was sponsored by Columbia's Graduate School of Business, under a grant from the McKinsey Foundation for Management Research.

I. How Executives See It

It's from the men who sat down at Columbia's round table for an eight-session study that you get some idea of the scope of the problem of selecting and developing executives. These included top brass from such companies as National Biscuit Co., American Can Co., and General Electric Co. Alongside them were management consultants, educators, a former Secretary of the Army, a psychologist, a psychiatrist, and a churchman and others.

There was some agreement among them, but not much. But they did come up with these benchmarks:

• To be a good executive you have to be dedicated, convinced the struggle is worth it.

• That implies that you must have emotional stamina—in good supply.

• For an executive, a college degree means simply that you have passed a first screening. The real test is what a man does after he's been on the job 10 years or so.

Finding good top-level potential among on-the-job candidates for higher positions is perhaps the toughest part of the problem. The round table members weren't too enthusiastic about tests for executive potential. One man said, "The test we use is how loud an outfit screams when you want to take a man away."

• **Rates and Tests**—With rating systems, as with tests for potential, the round table agreed there was room for much more study and improvement. But this point evolved: In testing and rating the problem is to rid the system of individualism and bias. Most of the participants agreed the recent trend to multiple rating and testing, through group judgment, is cutting down the subjective elements.

In its summary of the round table, Columbia's book concluded: "Industry and the armed services are both interested in validating their testing procedures and uncovering the subjective elements still present in their rating systems. Most of the members believed that industry must intensify its efforts to learn the values and limitations of the evaluation techniques it is using. Such an approach would have to borrow liberally from academic psychology and would probably require cooperative research by several companies."

To find how schools and industry are cooperating and advancing this vital knowledge, **BUSINESS WEEK** went to corporate officers, management consultants, and campuses—and found bustling activity everywhere. From the welter of study and information available now on the identification of management potential and ways of rating it, some projects stand out.

II. A Profession Yet?

Both the practitioners of management and some of its keenest observers have been calling for years for studies to establish finally whether business leadership has become a distinct profession, like law, medicine, or education.

In the March, 1955, issue of the Business History Review, Vassar Economics Prof. Mabel Newcomer presents the results of her detailed study, Professionalization of Leadership in the Big Business Corporation.

Her conclusion: If managing isn't already a profession, it's fast becoming one. She says there are five solid pieces of evidence to back up this. They are:

• The importance of wealth and family position has declined as a way to the top.

• Formal educational requirements have increased.

• More experience in the actual practice of managing is now required.

• Managers today are a devoted,

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• A professional code of ethics is emerging, although it's still somewhat amorphous.

Prof. Newcomer studied presidents and board chairmen of all large non-financial corporations in three business generations—1900, 1925, and 1950. She judged a corporation to be "big" if its assets totaled \$75-million in 1950, \$50-million in 1925, or \$25-million in 1900.

• **Guide to the Question**—She feels that the first test of professionalization is the extent and type of formal education of a profession's members. And, in partial disagreement with the Columbia round table members, she says: "A college degree is increasingly the ticket to admission to jobs with big corporations."

Three-fourths of the 1950 executives have some college education, and four-fifths of those appointed since 1943 have been to college. Of the 1925 group, 51% had college training; of the 1900 group, only 39%.

Prof. Newcomer admits it's harder to generalize about the type of education found among professional managers. Of the 1950 group, 19% had law degrees, 32% had engineering degrees. And the rest had degrees scattered among economics, accounting, and similar courses.

• **Arts or Sciences?**—What educational marks can be found in successful leadership of large corporations? To discover this, Prof. Newcomer set up a sample from the leadership of companies whose assets multiplied five times between 1925 and 1950. Against these she lined up officers of \$75-million corporations whose assets did not double in the same 25 years.

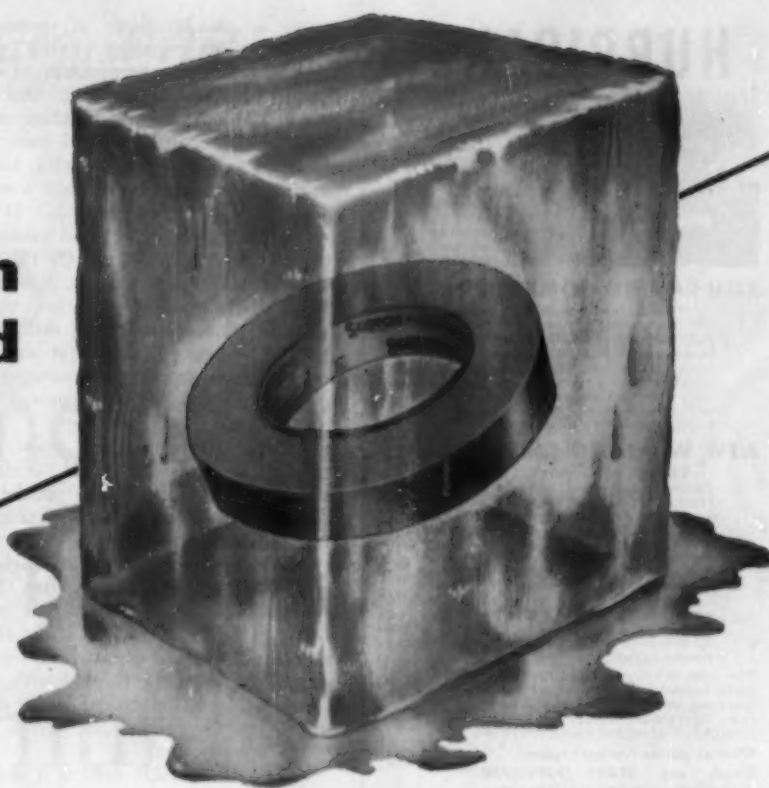
In the fast-growing corporations, 51% of the officers had college degrees; in the slow companies, 48%. But Prof. Newcomer points out, "the more striking difference lies in the proportion with specialized degrees—particularly in law." Only 6.8% of the officials of the fast-growing corporations had law degrees, while 14.1% of the top men in the static companies had them. And, while 30.5% of the top men in the fast-growers hold relatively unspecialized bachelor's degrees, only 19.3% of the leaders of the slower companies had such general education.

Another good reason for, and consequence of, "control by salaried professional managers, instead of investors, is that the pressure for immediate profits is lessened. The manager can afford to take the long view."

III. The Short-Run Problem

Prof. Newcomer's findings cover largely the long-term problem of in-

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ensuring a steady flow of potential managers into a company. But what about the short-range problem of day-to-day identification, testing, and appraisal of managers and budding managers? Why can't personnel men and executives, like the Columbia round table members, agree on what a manager should be, know, and do? Is the finding and appraisal of good managers still a matter of judgment? Of corporate climate? Of "expert opinion"? Or are there perhaps some underlying qualities, training, attitudes, skills, and personality backgrounds that can be said to be the marks of a manager for any company, in any management job, at any time?

More to the immediate point, can science, through empirical method, probe beneath biases and preconceptions to identify what really indicates management potential?

• Using Statistical Analysis—Richardson, Bellows, Henry & Co., Inc., have a project under way now that seeks answers to these questions. The study is using scientific statistical methods of analysis of the third, fourth, and fifth levels of management in 30 companies—roughly, the three levels just below vice-president.

What RBH wants now is a sample of high level executives big enough to validate its method for early identification of management potential. As RBH points out, there is too much hunch and intuition in selecting management candidates. "The need is for more objective measures," says RBH. "Careful research is required to separate the essential from the merely desirable qualities." Briefly, here's how the RBH study goes about identifying management potential:

(1) In each company, all members of management are ranked in order of competence by general agreement among themselves. A criterion score is then developed, based on this ranking.

(2) Through a consensus of management opinion, this group is broken down into three categories of success—high, middle, and low.

(3) Each man in each criterion group is tested, appraised, and interviewed to find common characteristics, skills, and background elements, in each of the criterion levels.

(4) Test results are compared to show the standing of the men in a single company and against all those in the study. These results are tried out with as many members of management as desired in each company.

(5) Finally, if a high relationship is found between the tests and actual performance as agreed upon in the first steps, a procedure is set up in the company's management development and identification program.

RBH feels its method is more scientific because its ranking procedures and testing devices are constructed to reduce subjectivity.

But one important question remains. What RBH would like to know, says its Pres. F. F. Bradshaw, is whether "all successful executives possess similar characteristics (perhaps in different degree), or whether different characteristics are essential in different companies and industries? This... can be answered only by a study which includes analyses of the characteristics of successful executives in several different companies and in different executive functions within these companies."

IV. Why Do They Fail?

Some 40,000 people have made use of Stevens Institute of Technology's Laboratory of Psychological Studies. Like many other schools, Stevens has concerned itself with the contrast between a successful and an unsuccessful executive. Unlike others, Stevens chose to explore negative characteristics to find if it could work back from case histories of unsuccessful executives and come up with clues to the reasons why good executives are successful.

Lab Director Dr. Frederick J. Gaudet asked nearly 200 companies: "Why did one particular manager in your company fail?" The questionnaire was built in two parts: The first listed "knowledge lacks," the second listed "personality lacks." Dr. Gaudet found that the data he collected "points significantly to the group of personality lacks."

The three lacks most apparent were: (1) inability to delegate responsibility, (2) lack of breadth of knowledge and (3) inability to analyze and evaluate. Each had a frequency of mention of about 10%. Close to them, at frequencies of 8% or 9% were: inability to judge people, inability to cooperate with others, inability to make decisions and lack of knowledge of personnel organization and administration. The first three of these point to personality failures rather than lack of technical ability.

• Guide to the Future—This information is a little discouraging for management appraisers. Everybody agrees that it's pretty easy to test for "knowledge lacks," much harder to root out and pin down the common and constant qualities of personality that are found in good executives. But, as Dr. Gaudet's study shows, when the chips are down, it's in the area of personality lacks that most failing executives find their downfall.

Therefore, more study, more research, more statistics of these changing, highly modified, and amorphous "traits" are clearly called for.

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Oil Wedding

Tulsa party celebrates merger of Sunray and Mid-Continent oil companies into U.S. 15th largest.

A 6-ft. 6-in. bride, Miss Mid-Continent Petroleum Corp., swept a 5-ft. 5-in. bridegroom named Sunray Oil Corp. into her capacious arms in a Tulsa (Okla.) ballroom last week in a mock wedding ceremony that climaxed merger festivities of the two oil companies.

The merger, which became official this week, creates the Sunray-Mid-Continent Oil Co.—the 15th largest oil company in the U.S. It boasts combined assets of \$486-million and sales approaching \$300-million a year.

• **All in Fun**—The "wedding" in Tulsa's Cimarron Ballroom was the final event of a dance party for employees and executives of the two companies. It was preceded by a mild Gridiron Club-style lampooning of the merger, staged by the Tulsa Press Club.

Chief characters in the skit represented leaders in the merger:

• **R. W. McDowell**, former Mid-Continent president and now president of D-X Sunray Oil Co., refining and marketing subsidiary of the new company.

• **Jacob France**, former Mid-Continent chairman, now a director of the new firm.

• **W. C. Hawley**, former head of Sunray, president of the new firm.

• **C. H. Wright**, former chairman of Sunray, now chairman and chief executive of the merged company.

• **In the Act**—A lot of competitors, neighbors, and others got into the act, too. A character representing Glenn Ames, division manager of Phillips Petroleum Co., complained, "They'll be almost as big as me. It's a merger I don't like." As the "wedding" began, Otis McClintock, president of the First National Bank & Trust Co. of Tulsa, was carrying a shotgun.

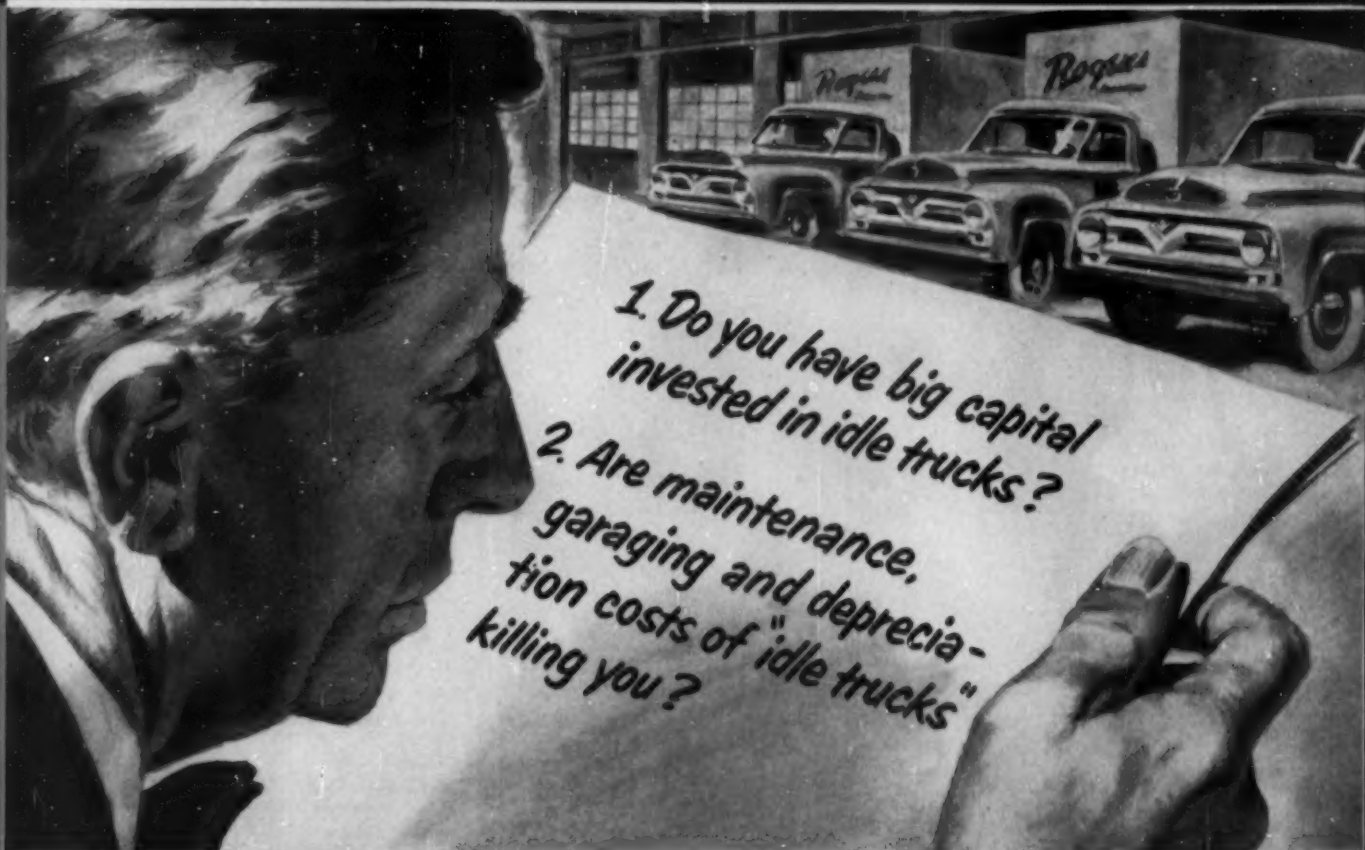
Later, the president of Deep Rock Oil Co., which recently sold its refining, marketing, and pipeline facilities to Kerr-McGee Oil Industries, Inc., rushed in to shout:

"This gives me a great idea;
Where's them love letters
From Kerr-McGee?"

A SEC flower girl led the procession, strewing new stock certificates down the aisle. Then the preacher proclaimed:

"Since there is no objection
From the SEC,
We'll proceed right now
With the ceremony."

Tall, gangling Miss Mid-Continent



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put some artificial light on the actual merger when she said:

"Preacher, I'll say yes with considerable elation.

He's going to help me keep open all the gasoline stations.

It may seem funny that my father's so glowery,

But my family believes he's Sunray after my dowry."

• **Gains**—Actually, in terms of oil "marriages," the ceremony made Sunray something more than a bigamist. That company's management has been on a corporate merger expedition since 1943. Its most recent merger: Barnsdall Oil Co. in 1950.

The Mid-Continent merger gives Sunray, the surviving company, the one thing it has never had: its own brand-name marketing facilities. Mid-Continent, though only about half as large in assets, topped Sunray's sales last year by about \$40-million. It has its own, and franchised, independent bulk and retail outlets selling D-X oil products in the Southwest, Midwest, and Prairies States.

Sunray gets also a tidy "dowry" that Mid-Continent brings to the deal—\$56-million in cash and receivables, against Sunray's \$37-million. The Press Club skit also took note of Mid-Continent's handsome dividend record. As the preacher put it:

"Slip 'er the ring, son, you're among friends,

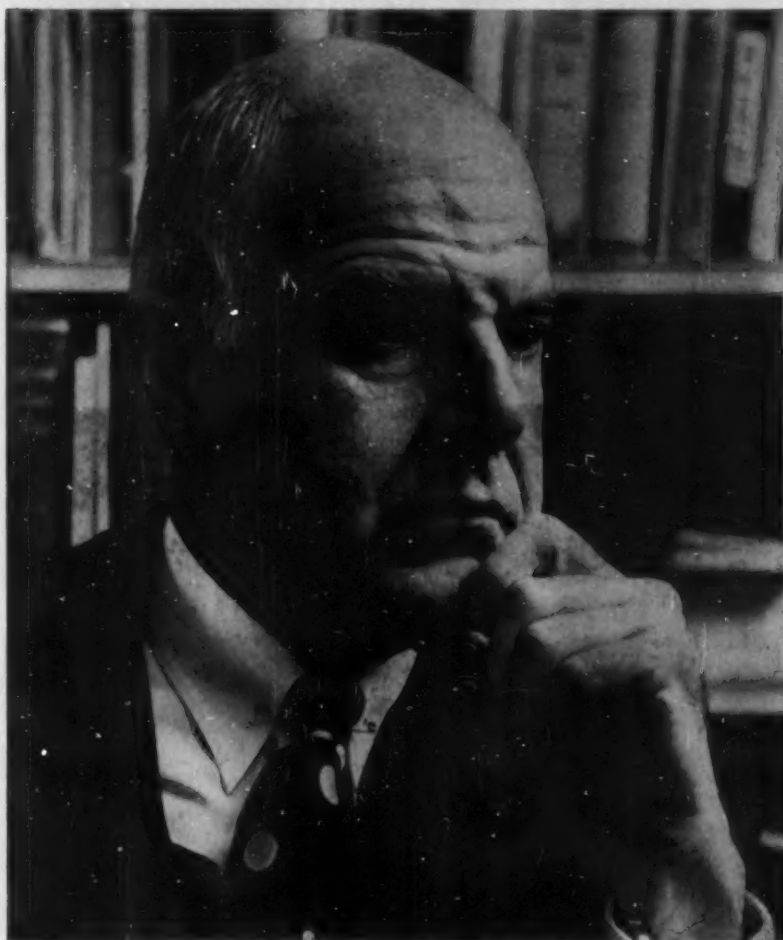
Besides, think of all them dividends."

MANAGEMENT BRIEFS

Columbia Broadcasting System will give unrestricted educational grants to 16 colleges this year, totaling \$40,000. The colleges were chosen on the basis of job performance by 20 of their graduates in key CBS positions.

• Maine's House of Representatives this week turned down a bill to block any merger or sale of Bates Mfg. Co., a textile outfit, to any out-of-state corporation. The State senate, which had favored the measure, must now reconsider it for possible modification. Another bill to apply the same restrictions to any Maine textile company lost.

• Harvard's B-School will soon offer an eight-month variation on its 16-month middle management program for executives. The short version, designed for men who can't stay away from their jobs for the full program, offers to certificate but no degrees, and includes all the prescribed courses found in the longer package, but no electives. The eight-month variant can be extended for another eight months and an MBA degree if the student can find the time.



NEW PILOT for NICB, Langbourne Williams, wants to help guide business by . . .

Looking At All Sides

Delegates at the 39th annual meeting of the National Industrial Conference Board at New York's Waldorf-Astoria this week had a big and varied schedule. They crowded in to hear former Pres. Herbert Hoover speak on efficiency in government, and they split up for panel discussions on such topics as operations research, credit policy, state right-to-work laws, and defense problems.

They topped it off by watching a new man take over as chairman of NICB from Cola Parker, chairman of Kimberly-Clark Corp. He was Langbourne Williams (cover and above), president of Freeport Sulphur Co.—new to the job, but an old hand in NICB and determined to maintain and extend its reputation as a nonpolitical and nonprofit center of information for business.

Tall and distinguished, Williams was a familiar name and face to most dele-

gates. They had known him as one of NICB's vice-chairmen and as head of its board of trustees. As chairman, he plans no radical policy changes, but hopes to expand membership and the scope of NICB activities. The way to do this, he believes, is by keeping the emphasis on fact-finding and service to business and industry.

• **Field**—As Williams sees it, the NICB can best serve business by concentrating on qualitative research—a field where it can operate without government competition. The Conference Board was set up originally to provide facts and figures on the economy where no data had been available. Now that the government has effectively taken over the job of compiling statistical information, many of the statistical services that NICB once provided are superfluous.

This is no reflection on its work. On the contrary, it had to shift its focus precisely because it succeeded to the

point where the government stepped in.

This shift to practical business research has given NICB much broader scope (BW—May 23 '53, p. 77). It's now the major organization devoted to gathering information, both statistical and factual, on industrial practices and problems. Though it inevitably comes into conflict with other institutions, it's as big a wheel in non-quantitative business research as the government is in statistics.

• **Independent**—It still has a lot in common with other organizations sponsored by business. But unlike such groups as the National Assn. of Manufacturers, the U.S. Chamber of Commerce, and the Committee for Economic Development, NICB does not see itself as an industry spokesman.

Williams has nothing against action and propaganda bodies as such. But he feels the usefulness, and the uniqueness, of NICB would be destroyed if it failed to maintain complete neutrality and independence.

Williams sees NICB as unique even though it is not the only business research organization. He admits that such bodies as the National Bureau of Economic Research, the American Management Assn., and others have a valuable role. But he feels that NICB is the only all-inclusive information agency, the only one interested in all phases of business operations.

• **Scope**—This has led to criticism of NICB for spreading itself too thin. Actually, however, it avoids areas where it feels it will be outclassed. It has made no attempt to deal with any basic economic problems, such as application of Keynesian economics, the theory of monopoly, or business cycle origins. It leaves these to the National Bureau and academic groups.

In its own province, NICB does cover a lot of ground. It has published research papers on such problems as plant location, executive compensation, sales forecasting—practically every subject of dollar-and-cents value to business. Its method is to investigate and report on the different ways that different companies handle these matters—providing the facts and figures, but itself taking a neutral objective position.

• **Grasping Thorns**—But neutrality doesn't mean flabbiness. It's Williams' view that NICB should wade into issues, no matter how controversial, as long as they interest its members. He feels the organization can measure its value by its ability to come to grips with tangled and touchy issues.

He doesn't think this will affect NICB's cherished independence—since its method is to provide a cool and collected report of all available facts—even at the risk of being somewhat

DRAMATIC NEW USE OF LIGHT STEEL BEAMS FEATURED IN HOME OF THE FUTURE

"RESEARCH VILLAGE," near Barrington, Ill., is an experimental development in modern architecture and building, sponsored by the United States Gypsum Company, in cooperation with the National Association of Home Builders and members of the American

Institute of Architects. The designing architect of the model home shown here is G. H. Coddington, AIA, Brooks and Coddington, Columbus, Ohio. Consulting Builder: W. Alexander Simms, Dayton, Ohio. Builder: Maxon Construction Co., Barrington, Ill.

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Note this smart looking section of the large recreation room. Here, the exposed J&L Junior Beams blend with the modern decor of a first-floor room, and provide firm support for the floors of the rooms above.



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stuff—and let the facts speak for themselves. He points out that the board has already explored such thorny topics as taxes, tariffs, industrial security, pension funds. He will try to apply the same technique to problems arising out of U.S. responsibilities as a world power. In his opinion, the NICB can act as a real educator of businessmen.

The technique has been used on problems of day-to-day business operation. The NICB research report on fringe benefits, for example, came up with no pat conclusions, but gave a thorough exposition of all the different plans that could be put in practice.

• **Yardstick**—The new emphasis doesn't mean that NICB has completely shunted aside its statistical work; this remains, in a sense, the backbone of all its research. It will continue to run its own consumer price index, even though the Dept. of Labor does the same thing on a much larger scale.

There's some logical justification, as well as sentimentality, in this. The NICB figures cover 22 cities omitted in the official index; so it's useful as a supplement. It also serves as a "yardstick" on the government. The two indexes have varied only minutely, but the existence of an independent survey is a safeguard against any possible manipulation in government figures, however unlikely it is.

• **Key**—Both Williams and John S. Sinclair, NICB's president, naturally stress the accuracy and objectivity of the Conference Board. Williams holds that its nonpolitical factual approach is the real key to its success—and to the fact that, even though it is dominated by business corporations, some labor unions have joined its rolls.

This is an age, Williams feels, in which people are confused by the conflicting arguments of conflicting propaganda machines. At such a time, the NICB, dealing only in fact, performs an essential function. "I feel very strongly we can do a job," he says, "that no one else is doing and that must be done."

• **Symbol**—There's no doubt that Williams will put in hard work to get across the NICB credo of facts and service. He himself seems to symbolize

its new look. Virginia-born, graduated from Harvard's B-School, now 52 years old, Williams came to New York in 1930 to become vice-president and treasurer of Freeport Sulphur, moved over to its presidency three years later, at the age of 30. He joined NICB in 1937. His easy patrician manner and soft drawl still remain straight Virginian.

Despite his full-time business job, he has been active on the Commerce Dept.'s Business Advisory Council, as a trustee of the American Church Institute for Negroes, and as a governor of New York Hospital. In 1948, he served in Paris as a director of industry for the Marshall Plan.

• **Expanding**—But NICB has been his major outside activity. In his new post, he wants to see it do two things, especially. First, to keep research, which usually lags behind events, abreast of developments and up to date. And second, to build on the progress already made in expanding NICB's operations and trying for new membership. He wants to get a bigger membership across the nation, rather than just in the East.

To do this, the NICB will be expanding its regional conferences, which bring together a top-level group of businessmen, educators, and publishers, on a regional basis, for a three-day off-the-record conference. Everybody gets a chance to talk, and there are no resolutions nor proposals for action—just a frank exchange of views and information to give the participants a new slant on business conditions.

NICB is also going further afield for its regular meetings on special economic problems—in the past held almost always in New York. Within the last 12 months, there were meetings in Houston and Chicago, and other cities are being considered.

The agenda of the regular meetings—and the program for this week's annual session—reflect NICB's broadened scope. There's something of interest for literally everybody with a stake in U.S. business. NICB is also holding annual conferences on atomic energy and its implication for business, while this week's sessions on the Hoover report were timed to the news.

Switch In Banking Figures

Statisticians charting the movements of the U.S. economy will have to make some slight changes in their maps, starting this week. With its report for the week ended May 11, the Federal Reserve changed its method of reporting the reserves and related items of its member banks.

The Fed's weekly statement on these subjects has been compiled from the figure for a specific day of the week—

Wednesday. Now, it reports the weekly averages. The Fed says that weekly averages are more significant in analyzing changes in member banks' reserves and related items.

BUSINESS WEEK publishes, on the Figures of the Week page (page 23), a figure showing total Federal Reserve credit outstanding. It is taken from the Fed's report; so BUSINESS WEEK will also shift to the weekly average.

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FINANCE

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1954	1955			1954	1955		
American-Marietta .. 7.5% 10.2% +40.5% +74.6%				Minnesota Mining 20.5% 24.1% +17.2% +40.9%			
Formica Corp. 11.6 14.7 +27.0 +61.1				Scovill Mfg. . . 7.1 12.4 +26.8 +125.9			
General Motors 16.2 22.1 +28.7 +63.6				U. S. Gypsum 28.8 30.1 +21.1 +35.0			
Maytag Co. . . 15.2 19.5 +41.8 +78.1				Wallace & Tiernan 7.9 10.5 +15.3 +89.1			

(2) Even a Slight Hike in Them Helps When Sales Are Barely Climbing—Or Are Sagging

First Quarter				First Quarter			
Pretax		1955 vs. 1954		Pretax		1955 vs. 1954	
Profit	Margin	Sales	Earnings	Profit	Margin	Sales	Earnings
1954	1955			1954	1955		
American Tobacco ... 7.9% 8.0% + 0.6% -2.0%				Cluett, Peabody .. 9.2% 9.7% -12.1% - 5.8%			
Babcock & Wilcox 10.5 13.0 -15.1 + 8.1				McQuay-Norris 3.3 4.0 -23.0 + 2.7			
Bethlehem Steel 18.1 21.6 + 1.3 +27.0				National Dairy 5.4 5.7 + 0.9 +13.2			
Clevite Corp. 12.1 14.3 + 1.2 +24.9				U. S. Steel ... 10.6 16.9 + 5.1 +62.1			

(3) When They Slip They Erode Earnings Benefits From Rising Sales

First Quarter				First Quarter			
Pretax		1955 vs. 1954		Pretax		1955 vs. 1954	
Profit	Margin	Sales	Earnings	Profit	Margin	Sales	Earnings
1954	1955			1954	1955		
Belden Mfg. ... 12.2% 10.2% + 6.0% -16.6%				Gaylord Container .. 18.4% 16.2% + 7.2% - 2.0%			
E. W. Bliss ... 13.6 7.9 + 9.6 -26.0				Goodyear T. & R. 9.5 8.0 +21.9 - 3.5			
Bridgeport Brass 10.7 7.7 +28.9 - 4.0				Houdaille-Hershey ... 9.0 5.1 +13.2 -38.0			
Cone Mills ... 8.0 5.1 +21.6 -18.9				Nat'l Malleable 8.3 6.3 +18.9 - 0.5			

(4) And When They Sag Along With Sales, Profits Really Dip

First Quarter				First Quarter			
Pretax		1955 vs. 1954		Pretax		1955 vs. 1954	
Profit	Margin	Sales	Earnings	Profit	Margin	Sales	Earnings
1954	1955			1954	1955		
Anheuser-Busch 12.2% 8.8% - 9.7% -35.3%				Pullman, Inc. . . 8.5% 3.5% -35.9% -69.6%			
Bucyrus-Erie 18.6 14.9 -28.2 -42.1				Standard Brands 6.1 4.9 -10.1 -23.7			
Emhart Mfg. . . 18.8 14.5 -15.5 -27.2				Westinghouse Elec. 13.9 6.7 - 9.6 -51.4			
Nat. Cylinder Gas 14.3 9.9 - 9.2 -35.8				Weston Elec. Instrument .. 9.1 7.5 -22.9 -39.3			

©BUSINESS WEEK

The Plateau Has Dips, Rises

If you run a hasty eye over the latest over-all business statistics, you get an impression of a beautiful high plateau. A closer look, though, as in the tabulation above, reveals that the plateau is basically a collection of quite steep hills and ravines.

In effect, that explains the seeming paradox that Wall Street's glumest bulls admit the present recovery may carry January-to-June figures to the highest on record, just at a time when gladsome bulls are warning against making serious decisions on the basis

of over-all figures of sales and earnings.

Those over-all figures, incidentally, look lovely, as reported in a first-quarter review of 576 manufacturing companies, as compiled by New York's first National City Bank:



Restoring Niagara's Scenic Grandeur

"A spectacle without parallel on earth," was the way Father Hennepin, first white man to look upon Niagara, described the scenic wonder when his explorations took him to the falls in 1678. For unrecorded ages water has been thundering over the Horseshoe Falls at a rate that engineers estimate at around 3000 tons per second.

Through long centuries this torrential flow has caused gradual erosion that, unchecked, would in time narrow the falls and destroy its scenic grandeur.

Remedial action got under way last fall, not long before the above picture

was taken. Plans called for enough rock to be excavated on the American side to lower the bed of the river three to six feet over a large area (at left of picture), in that way restoring an evenly distributed flow of water across the falls. Later a similar project will start on the Canadian side (at right).

The contract work on the Niagara River Remedial Project was directed by the district engineer of the Buffalo District, Corps of Engineers, U. S. Army. The cost was reduced by a bold expedient devised by the contractor, Norman H. McLain, of Buffalo. In drying the

6 acres of river for dynamiting and rock-removal he used a movable shield, held against the current by stout Bethlehem wire cables a quarter mile long, moored to an anchorage upstream. Working behind this shield as it advanced, McLain's men gradually constructed an L-shaped dam of rock and gravel faced with Bethlehem steel sheet piling (see white arrows).

Completion of the project makes the famous Horseshoe Falls a more magnificent spectacle than ever, presenting to the tourist an unbroken, even curtain of descending water.

BETHLEHEM STEEL



The logo for Rock & Pop magazine, featuring the letters 'R' and 'P' in a stylized, bold font, with the words 'ROCK' and 'POP' partially visible behind them.



Thanks to modern science, you can make things

stick together... and stay stuck!

PRIMITIVE MAN used pine pitch and mud to stick things together. These were his adhesives.

INCREASING NEEDS caused man to seek stronger, more durable adhesives. He found he could make them from animal, fish, and vegetable products.

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THIS RESEARCH, however, together with the development of new chemicals and plastics, led to whole families of new adhesives that now serve us in a variety of ways.

YOU CAN GET quick-setting household cements that mend almost anything. Your furniture is held together

with stronger, more enduring glues. Safety glass windshields, tapes that stick at a touch, and plastic floor coverings are possible because of modern adhesives.

MAKING CHEMICALS AND PLASTICS that are essential to these and other adhesives is but one of the many important jobs of the people of Union Carbide.

FREE: Learn how *ALLOYS, CARBONS, GASES, CHEMICALS, and PLASTICS* improve many things that you use. Ask for the 1955 edition of "Products and Processes" booklet B.

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			NATIONAL Carbons

"... most companies find their highest obstacle in labor costs ..."

PROFIT MARGINS starts on p. 56

most corporations have long been plowing back earnings, they haven't all shown the same improvement in profit margins.

The answer is complex. In some trades—textiles are a notable example—there hasn't been enough business lately to permit maximum efficiency in using new capacity. In some other lines, much of the latest installation is so new that costly bugs have yet to be eliminated.

Most important of all is the double downward pressure on profit margins that has been exerted since V-J Day by:

- Increasing competition, which tends to force prices down.
- Constantly rising operating costs that generally have borne most heavily on smaller companies—with a few notable exceptions, some of which appear in the tabulation.

• **Cost Factor**—In the cost situation, the pressure comes from many sides. Labor gets more expensive, both directly in wages and indirectly through pensions, insurance, and other fringes. Rents, maintenance, and repairs march upward. So do depreciation charges, because of the huge amount of postwar building, especially under accelerated depreciation schedules. And the costs of sales promotion, research, and development push steadily against the ceiling.

Raw materials, too, have played a big role in rising costs. Some of them have dropped in price, but the more important ones have advanced. The prospect is for more of the same in the next months, notably in steel.

Most companies find their highest obstacle in labor costs, though the importance of the factor varies from trade to trade. In some industries, wages eat up a mere 15% of the gross; in others, the figure runs to a full third or even higher.

To some extent, labor costs are like the oft-cited iceberg: A lot of it lies below the surface. Thus the total share of labor in a given company is likely to be a lot more than appears on the books as payroll. For buried in the "real" cost is the factor of labor costs in raw materials, parts, supplies, and transportation that the company must use.

Commerce Dept. statistics probably give the truest estimate. In a recent tally, the department figured that salaries and wages made up more than half of the gross national product.



Chrysler Building East, New York City
Reinhard, Hofmeister & Wolquist, architects
Photo: Sigurd Fischer



marble in profusion . . .

at the entrance loggias, the main and lower concourse levels, the stairways, connecting tunnels to the main Chrysler building, all elevator lobbies, floors, toilet partitions . . .

Marble to cut maintenance costs, promote cleanliness, provide beauty, attract business, protect an investment . . .


Marble to realize the true meaning of economy . . . and at a cost that is only a fraction of the savings it will provide . . .

IN FACT, Marble in profusion, from top to bottom of the 32 story Chrysler Building East, cost only 2.7% of the total construction cost.

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"Proof that Marble costs less . . ." "Marble Forecast, 1954-1955" "Marble in the Bank"

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Contingencies Covered, Too

Business interruption insurance can include losses due to failure of suppliers . . . New SEC head warns on securities ads . . . The Treasury 2% flop.

You'll be hearing more about the fairly new, contingent type of business interruption insurance.

This coverage is designed to protect a company from loss of earnings when a main supplier or sales outlet is hit by fire or other catastrophe.

Ordinary business interruption insurance—designed to protect a company against losses resulting from accidents in its own plants—has been available for some years. But it was not until the famous Livonia fire in the General Motors transmission plant (BW—Aug. 22'53, p28) that businessmen really got interested in the contingent brand of insurance.

Not a single one of the auto producers that relied on the Livonia plant for transmissions was covered against the losses that resulted from the fire. And even after the warning, few companies carry protection against such loss. Edwin Q. Morrison, secretary of the Agricultural Insurance Co., of Watertown, N. Y., says that only 1% of some 800 businesses surveyed recently either carried contingent business interruption insurance or had set aside funds to cope with such an emergency. Yet most of the 800 were dependent on suppliers.

• **How It Works**—Here's a genuine example of how contingent coverage works, though the names are fictitious.

ABC Mfg. Co., a lamp maker in the Midwest, carried contingent coverage, since it was wholly dependent on the nearby XYZ Products, Inc., to supply it with lamp bases. A year ago on May 4, fire wiped out the XYZ plant, destroying the special dies and coloring equipment needed for the bases used by ABC.

Production at ABC came to a dead stop, until it was able to arrange with a third company to supply lamp bases during the many months it would take to get XYZ back in production. The new supplier had to be provided with a special continuous tunnel kiln, along with dies, molds, and equipment, at a total cost of \$25,356. But within three weeks of the fire, the third company was turning out some lamp bases; by October the kiln was running at capacity. ABC was back in business, with its potential over-all loss considerably reduced.

• **Estimates**—At this point, the insurance adjusters went into action to determine what ABC's real loss had been. First, they estimated that 73.26% of ABC's annual business would have been

done in the period from May 4 to the end of the year. For this stretch, it was figured that without the fire ABC would have had gross sales of \$1.9-million, net profits of \$135,000.

Matching these estimates against actual sales and profits, the insurance company paid ABC \$201,754 to compensate for losses due to the XYZ fire. Of this, \$37,395 was for "lost" net profit, \$139,003 was for fixed executive salaries, advertising and promotion commitments, and other operating costs, and the remainder to replace the \$25,356 that ABC had spent to set up its interim supplier.

The premium on ABC's contingent coverage: \$1,372.50 a year.



J. SINCLAIR ARMSTRONG

The new chairman-designate of the Securities & Exchange Commission, J. Sinclair Armstrong, made a strong pitch last week for stricter regulation of securities advertising by the industry itself to "take the flamboyance and come-on techniques out of securities advertising." The alternative to stronger self regulation, said Armstrong, would be for SEC "to use the federal power to stamp out abuses of which the securities industry is aware but against which it has not yet moved with cohesiveness and determination."

The National Assn. of Securities Dealers and the New York Stock Exchange have the power to police their members' advertising thoroughly, and can effectively move against their own members who violate its rules. But Armstrong feels they could do a better

job. Armstrong also points out that there are over 1,000 dealers outside NASD, and that somehow, if the current abuses continue, these will have to be put under some regulatory body.

The biggest stumbling block to wider spread SEC regulation is lack of adequate funds, according to Armstrong. "Since the summer of 1953," he says, "the staff has been reduced from 825 members to 670, and we are running a little thin." If the industry itself doesn't take steps to enforce stricter policing of advertising, Armstrong might seek higher appropriations for SEC from the Bureau of the Budget.

If anyone ever doubted the fact, it's generally conceded that the new Treasury issue of 2%, 15-month notes was a bust (BW—May 7'55, p52). The signs of disfavor with the notes are overwhelming and unanimous. First, they have traded at a discount since they hit the market. Then the oversubscription on the \$2.5-billion worth being offered for cash came to only 62%, the lowest oversubscription in years (BW—May 14'55, p136). Late last week came the clincher: Of the total \$3.9-billion worth of maturing certificates that were to be exchanged for the new notes at the option of the holder, \$709-million worth had to be paid off in cash. This represented an 18% rate of attrition, the worst fate of any major Treasury refunding since the present Administration took office.

The biggest factor behind the high attrition rate is that corporate holders of the maturing certificates wanted cash rather than the new notes, feeling that the 2% yield was unattractive.

The billion-dollar logjam of turnpike issues is beginning to unclog. Last week, supreme courts of Florida and Texas approved multimillion-dollar issues long held up in the courts. Florida's \$74-million issue for a 103-mile turnpike between Fort Pierce and Hollywood is expected to hit the market within a week or two. Texas' \$58.5-million worth of bonds for a Dallas-Fort Worth turnpike will probably be a little later. Two other Texas offerings totaling \$183-million plus other states' offerings totaling nearly \$900-million are still held up by litigation (BW—Apr. 30'55, p100).

The St. Louis-San Francisco Ry. has stepped up its purchases of common and preferred stock of the Central of Georgia Ry., and now holds over 26% of both issues, according to Frisco's president, Clark Hungerford. Hungerford pointed out that a merger wasn't being contemplated at this time, but the Frisco would try to tie in its operations more closely with C of G's.



Progress Report 1954

Safeway's Story in Figures...

	1954	1953
SALES	\$1,813,516,436	\$1,751,819,708
Income from dividends, interest and other sources	226,002	283,199
Cost of merchandise—paid out to farmers and other suppliers of goods and expended for manufacturing and warehousing	1,531,502,208	1,484,147,300
Total operating and administrative expenses, other charges and provision for income and excess profits taxes	268,256,659	253,410,675
NET INCOME	13,983,771	14,544,732
Dividends to preferred stockholders	1,915,397	1,914,418
Net Profit applicable to common stock	12,068,374	12,630,314
NET PROFIT PER SHARE OF COMMON STOCK based on average number of shares outstanding during the year	3.52	4.31
Dividends to common stockholders	8,236,264	7,090,914
Dividends per share to common stockholders	2.40	2.40
Number of new stores opened during the year	44	16
Number of stores closed during the year	83	71
Number of stores in operation at end of year	1,998	2,037

Quick Facts:

Safeway set a new sales record in 1954. Total net sales showed an increase of \$61,696,928 over 1953.

Due to the Company's decision to meet trading stamp competition head-on throughout its operating territory, net profit was slightly less than earned in 1953.

All of the Company's 4½% Convertible Preferred Stock was called for redemption April 1, 1954. All outstanding Convertible Preferred was converted into common stock.

April 21, the Company issued and sold 267,000 shares of new 4.30% Convertible Preferred Stock. Proceeds from the sale were applied on short term bank loans.

Uninterrupted cash dividends have been paid on all outstanding shares of Safeway's common and preferred stocks since the Company's incorporation in 1926.

1954 was impressive from the standpoint of Safeway's construction program. 44 new retail stores, 39 in the United States and 5 in Canada were completed.

74 retail stores were under construction and should be completed by July, 1955. Plans and specifications were prepared or in the process of preparation for 94 retail stores. These stores should be in operation before the end of 1955.

Excellent relations existed between Safeway, its employees and their union representatives during 1954. No serious labor controversies or work stoppages took place during the year and none existed at the year end.

Liberal group insurance, retirement and profit-sharing programs are available to Safeway employees.

Lingan A. Warren
President



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**SAFEWAY
STORES
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*Safeway is the World's Second
Largest Retail Food Concern*

PRODUCTION



• • Tomorrow's Engineer:

- He will look more like a scientist, less like an engineer.
- He will know less about one specific field at the start, but he will have a better grasp of the fundamentals.
- Industry says, "OK. We don't want specialists anyway."
- But not all educators agree, and there may be trouble on the campus, in . . .

TRYING TO MAKE . . .

A New Kind of Engineer

You sense it on almost every campus: A fundamental shift in philosophy is filtering through the country's engineering schools. You don't see it taking form yet in most classrooms—it's still too early for that.

But two strong clues will show up next month to indicate the direction engineering education is about to take.

The first is a report on evaluation of engineering education that will be submitted by a committee of 45 deans of engineering schools to the American Society for Engineering Education. The committee will urge that parts of the engineering curriculum be scrapped. Says the report: "Unduly repetitious material does exist and should be eliminated. . . . Other areas . . . are those courses having a high vocational or skill content and those primarily attempting to convey engineering art or practice."

The committee seems to feel that such training should not be an inherent function of engineering education, particularly at the undergraduate level. In its place, the committee recommends more work in the basic sciences—mathematics, physics, and chemistry—and more emphasis on the engineering sciences, which include such subjects as mechanics of solids, fluid mechanics, thermodynamics, electrical theory.

The second clue will come next month, at Massachusetts Institute of Technology, when a new kind of engineer receives a degree. He will be called an electrical engineer, but his undergraduate training has been quite different from the traditional electrical engineering program.

He will be better educated in the basic sciences, though he may know less about certain kinds of electrical machin-

ery, for MIT no longer teaches such old standby courses as alternating current and direct current machinery. The man who conceived the new program and put it to work at MIT is Prof. Gordon S. Brown, head of MIT's electrical engineering dept. He says that this first crop of new engineers—there are 150 in the class—may know less quantitatively, but they will be more flexible men because of the training they've had.

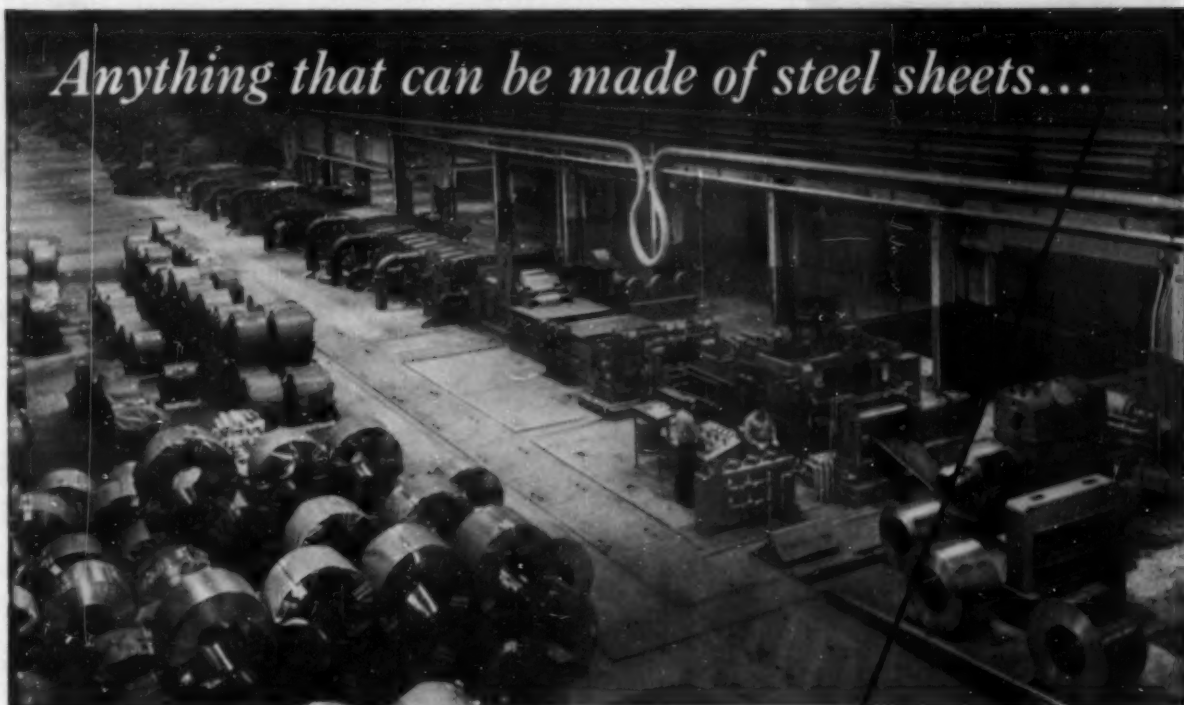
• The Background—Certainly, a single report by a group of educators, plus a change in one school's electrical engineering program do not necessarily represent a national trend. But a closer look at the report's preparation, and a look at the activities of other engineering schools, does show that a fundamental shift is under way.

Take the report. Its preparation began three years ago and since then fac-

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Anything that can be made of steel sheets...



You are looking in on a miracle of modern engineering... Wheeling's new continuous galvanizing line, built at a cost of over \$3,000,000.

The end result is **sofTITE**, the galvanized sheet with the tightest zinc coating yet produced... so tight it won't flake or chip no matter what you do to it. So tight, you can use Wheeling **sofTITE** to make anything that can be made of steel sheets.

That's **sofTITE**... Wheeling **sofTITE**... made by the company that led with the development of **COP-R-LOY**, the original copper-bearing steel pipe, then perfected **DUCTILLITE**, the original cold reduced tin plate which revolutionized the tin plate industry, and opened new fields to the can maker and packer. Now, **sofTITE**... acclaimed the best galvanized sheet yet produced - so good, in fact, that because of the unprecedented demand, Wheeling has been forced to triple its production facilities in 1955. **sofTITE**, a product of Wheeling Steel Corporation, Wheeling, West Virginia.

...can be made of

**WHEELING
sofTITE**

galvanized sheets



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The skills of Our People... OUR GREATEST ASSET

Yes, we have every physical and material asset that you will find in any industrial State...

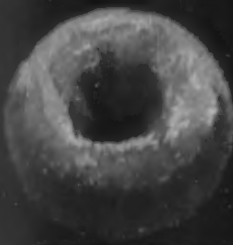
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ulty committees of more than 100 engineering schools have hammered out their own reports, covering the same ground. The report to the ASEE is really a summation of the recommendations of those smaller groups. So, it represents grassroots thinking.

Furthermore, most industrial firms seem to want the kind of educational program that the committee recommends: Last year, the members of the 41-man committee met in Atlanta with men from industry. The companies that were represented hire some 80% of the engineers in the U. S. Their representatives told the committee, in effect, "Don't give us specialists." They urged the schools not to sacrifice education in the engineering sciences for the study of technology or administration.

• **Other Schools**—In the past couple of years, other engineering schools have begun to juggle their undergraduate programs. For example, the University of Michigan will offer this fall an undergraduate program in science engineering that emphasizes basic sciences and engineering sciences.

Case Institute of Technology is offering a similar curriculum this fall. It's designed to prepare students for careers in research. A greater-than-average proportion of those who complete the course are likely to go on to graduate work in specialized fields.

Penn State University will graduate a group of engineering scientists in June 1956. This program got under way three years ago. Twenty of the brightest students from the incoming class were started in the new program. Their training will include four years of math and physics, only a semester in some specialization.

It might turn out that the engineering science program will become a haven for the more gifted student, who should be moved along faster during his undergraduate years. But recommendations in the report to the ASEE apply to all engineers.

• **The Opposition**—A few educators insist there's nothing new in MIT's program or the recommendations of the ASEE committee. They say the drift back to the fundamentals of science and engineering has been going on for some time and that "MIT has just gone the farthest the fastest."

On the other hand, the head of one electrical engineering department says that MIT's move is new, and that it is a bolder one than he would care to take.

Of the committee's recommendations, a few educators say that they are not much different from a report that ASEE produced more than 20 years ago which said that technical specialization had gone as far as it should. To this, the committee replies that some schools did not heed the warning of 20 years

ago and that few existing curricula contain all the engineering sciences.

• **The New Program**—The committee's recommendations on curricula would give about half the student's time for mathematics, basic sciences, and engineering sciences. About one-fifth of his undergraduate work would be in the humanities and social studies—history, economics, and government; literature, sociology, philosophy, psychology, and fine arts.

And about one-quarter of his time would be spent in engineering analysis and design. The committee cautions that such subjects should be taught by men who are making active contributions to progress. "For example," says the committee, "courses in internal combustion engines are often largely descriptive in nature, which places them in a sub-professional category. They can be vital experiences in which the principles and advanced analytical techniques of the mechanics of solids and fluids, thermodynamics, and heat transfer are used effectively." In other words, the committee urges that such courses put the basic engineering sciences to work to show how these fundamentals apply.

• **The Objective**—The objective of this fundamental approach to engineering was perhaps summed up best last week by Dr. V. Lawrence Parsegian, of Rensselaer Polytechnic Institute, a nuclear scientist. He said, "What we are trying to do is to make things fit together. So often today, the chemists will teach you the atom. Then the physicists will teach you the atom. But you would never know that the two were really the same atom."

• **Where to Make Room?**—The problems for the schools, if they are to move back to a more fundamental approach to engineering education, are: (1) where to put those fundamental courses, and (2) which courses to scrap. The suggestion that some material now in the curriculum be eliminated will cause conflict in some schools.

But the report does not suggest that this is the only way to make room for the fundamentals. It suggests other possibilities: (1) raise the prerequisite for entrance, (2) increase the effectiveness of instruction, and (3) extend the curriculum to more than four years.

The report does not stand firm on an extension of the curriculum. It says: "The Committee takes no position with regard to the length of the program. It believes, however, that further experimentation is called for in all four of the means suggested for introducing new curricular material."

A number of schools take a strong stand for the five-year course. A few have already introduced it: Minnesota, Ohio State, Rice, and Cornell. All three engineering schools in Los Angeles say that they favor a five-year program.

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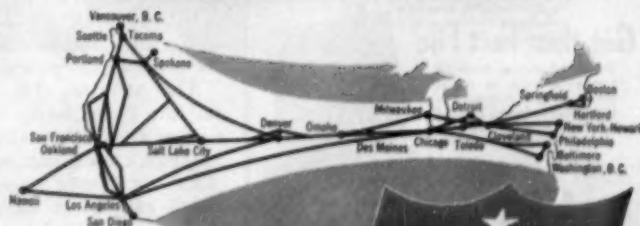


Mr. Charles F. Pennock, Philadelphia wholesale florist, inspects an air freight shipment arrival.

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Pennsylvania RR

Train

Low-slung, lightweight of tubular design made by Budd Co.

Locomotive

Will use existing standard engines; diesel 240,000 lb. 1,500 hp.

Atchison, Topeka & Santa Fe Ry.

Train

Double-decker, rugged but luxurious. Made by Budd Co.

Locomotive

Will use existing standard engines; 3-unit diesel 747,000 lb. 4,500 hp.

Chicago, Rock Island & Pacific RR

Train

Talgo: Light, low center of gravity. Made by American Car & Foundry Co.

Locomotive

Lightweight GM diesel 169,000 lb. 1,200 hp.

New York, New Haven & Hartford RR

Train

1. Talgo: Light, low center of gravity. Made by American Car & Foundry Co.
2. Light tubular model built for looks and speed. Made by Pullman Standard Car Mfg. Co.

Locomotive

1. Lightweight GM diesel 169,000 lb. 1,200 hp.
2. German developed; lightest made diesel, 135,000 lb. 1,000 hp. To be made by Baldwin-Lima-Hamilton.

New York Central RR

Train

Light tubular model built for looks and speed, made by Pullman Standard.

Locomotive

German developed; lightest-made diesel; 135,000 lb. 1,000 hp. To be made by Baldwin-Lima-Hamilton.

For Light Cars, Light Diesels

The tabulation above shows how five U.S. railroads are trying to spruce up their passenger services with new, lightweight cars. It also shows how some of the roads plan to make their trains faster and more economical to run by adopting lightweight locomotives to haul the new cars.

Two roads—the New York Central and the New York, New Haven & Hartford—have settled on a German-designed diesel that is smaller and lighter than any now used in the U.S. for commercial passenger traffic.

The Atchison, Topeka & Santa Fe and the Pennsylvania RR will use the motive power they already have. The Santa Fe's latest unit is designed to increase the road's passenger capacity—which may mean more baggage cars. (Big diesels will haul this big load.) The Pennsy says that the problem right now is not new motive power, but how to build passenger cars that can travel as fast as the engines. When cars can hug the rails better than engines, Pennsy says, that will be time enough to worry about new engines.

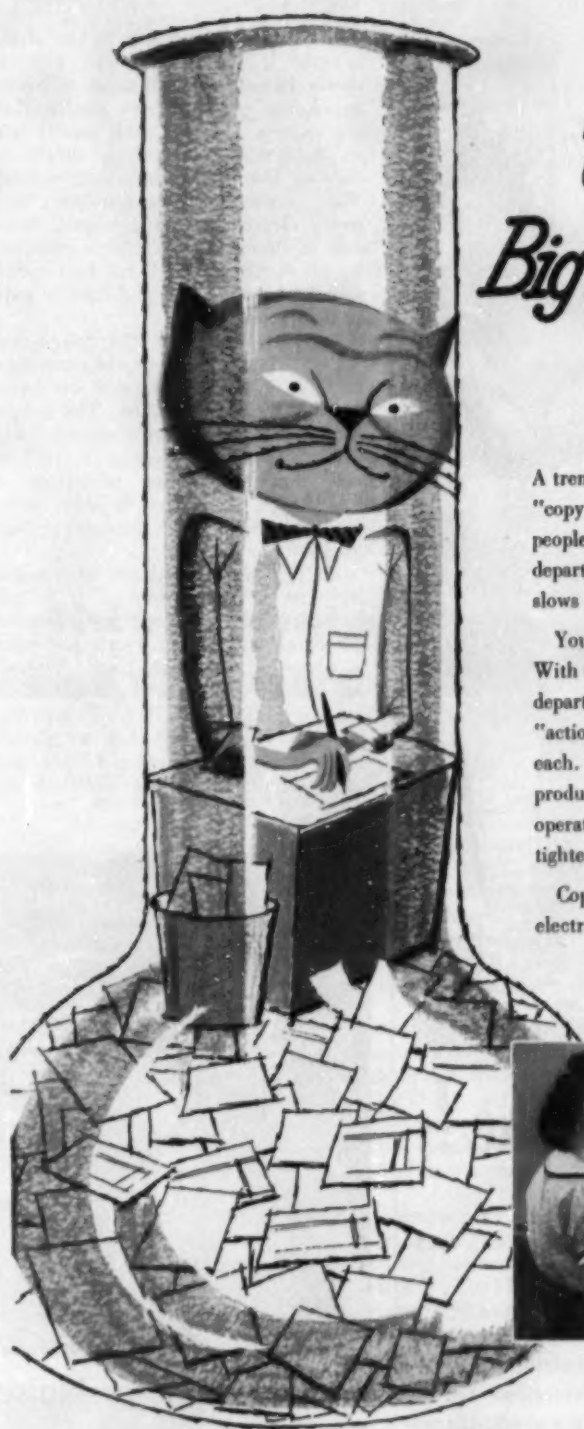
The Rock Island's new unit, which will be used to haul its Talgo train, also shows a significant weight decrease.

• **News**—The really new development for roads, however, is the German diesel that will be made by Baldwin-Lima-Hamilton.

The standard diesel locomotive actually is a diesel-electric. The diesel drives an electric generator; the generator drives electric motors; and the electric motors drive the wheels. Between the diesel and the train truck there are two major intermediate steps in which mechanical energy is changed into electrical energy, then back into mechanical energy.

The German Maybach engine, new to the U.S., can be used to build a locomotive that sits closer to the rails (it's about 11 ft. high), weighs less than the conventional commercial passenger diesel. In addition to having a lower center of gravity, the new engine will probably cut original costs, maintenance, and fuel bills, New York Central engineers say.

According to these engineers, the



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You can eliminate this bottleneck with new Copyflex Model 100. With Copyflex, original information is written only once—different departmental copies are mechanically reproduced from the original "action" paper. Letter-size copies are produced at less than 2¢ each. Copyflex one-writing systems speed and simplify purchasing, production, shipping, invoicing, accounting, and a host of other operations. They free personnel for other important work, give you tighter control of operations, save thousands of dollars.

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Serving industry everywhere!

Maintenance finishes that say "come again"—product finishes that say "buy again!" Both are part of the wide scope of services Sherwin-Williams is supplying leaders in American industry.

Whether your industrial finishing needs involve one product or

many—Sherwin-Williams can help you simplify purchasing . . . eliminate duplication of effort . . . establish and maintain coast to coast finishing or color standards. Check your Classified Telephone Directory or write The Sherwin-Williams Co., Cleveland 1, Ohio, or Montreal.



SHERWIN-WILLIAMS

Paints for every industrial need

diesel engine can sit close to the wheels because it uses a different kind of power transmission. Instead of having an electric generator and electric driving motors, the Maybach model uses an automatic transmission similar to that in some of today's automobiles. This mechanical transmission takes power directly from the engine, transmits it directly to the wheels, eliminating all middle steps. It has four speeds forward, four back, and shifts gears automatically.

• **Economics**—Because the design cuts out all electrical equipment, engineers say the locomotive should be easier to build and to maintain. The weight savings will mean fuel economy, since part of an engine's job is to pull its own weight. Another advantage of the smaller size is that it holds down wind resistance, which increases at high speeds.

Interest in the Maybach was sparked last year, when a group of U.S. railroadmen visited Europe and observed the European model, which had been in operation for some time. Though they couldn't agree on a general standard for U.S. roads (BW—Feb. 19'55, p27), the trip speeded U.S. acceptance of the low-slung lightweight train, and later, acceptance of the Maybach engine.



Measuring Motor Noise

The sound specialist (above) at General Electric Co.'s general engineering laboratory is using a soundproof chamber to measure the noise coming from an electric motor. Inside the chamber, the technician is suspended in air on a floor of wire mesh and surrounded by spun-glass baffles. That way, conditions such as reflected sound are carefully controlled. The motor's noise, picked up by a microphone, is recorded on the screen of an oscilloscope.



this bicycle race cost \$20,000 every year!

In bicycle manufacture, the race is to the swift. It takes smooth, high speed production methods to produce the best — profitably.

This was the problem of one of the world's leading bicycle builders. An important operation involved punching 36 spoke holes simultaneously in every wheel rim. To lubricate the punches and dies manually, a cover had to be left open. Dies and punches were blocked by accumulating scrap. Wear was such that they had to be replaced once a week. The cost on all four machines used in the operation ran into \$20,000 a year. Punching those rim holes was making a sieve of the budget.

Then an Alemite Lubrication Representative was called in. After a careful analysis of the problem he came up with an inexpensive recommendation. An automatic Alemite lubrication system was installed with a minimum of trouble. This new system lubricated the punches and dies constantly with the machine cover closed. Results: No more scrap clogging punches and dies. The saving on parts, maintenance, downtime and increased production was \$20,000 a year!

This is typical of the assistance Alemite offers industry. Whatever you manufacture, whether your plant is large or small, chances are an Alemite system or Alemite equipment can save you money. And expert lubrication counsel is yours at no cost or obligation whatsoever. Wherever you are, there is an Alemite representative ready to serve you.



Here, an Alemite loader pump is being used to fill a grease gun. The saving over hand methods is 15 man-hours for every 400 pound drum of lubricant used. Further, only clean lubricant reaches bearings, maintenance costs go down, and house-keeping is easier.

ALEMITE

37 Years of Lubrication Progress



The coupon below will bring you an interesting booklet, "5 Plans for Better Plant Lubrication." Send for it. And a phone call will bring an Alemite expert, who will be glad to give you an "on-the-spot" demonstration of how Alemite methods can save you money.

FREE New Booklet!

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1850 Diversey Parkway, Chicago 14, Illinois

Gentlemen: Please send me my free copy of "5 Plans for Better Plant Lubrication." No obligation, of course.

Name

Company

Address

City State



ETHEL: You didn't ask the price.

LUCY: Ethel, you don't ask the price in a place like this.

ETHEL: You don't?

LUCY: Of course not. You wait till they turn their backs and then you sneak a look at the price tag.

If there are still some advertisers who are intimidated by television's dimensions, we'd like to put them at their ease.

Despite the obvious impact of the medium, its tremendous audiences, and its hold on the attention of the average family for over five and a half hours a day, today's television advertiser is a shrewd shopper.

He wants to know if he is getting consistent, cumulative sponsor identification. He's no longer dazzled by mere size of audience. Like any other shopper who likes to know what things cost, he looks very sharply at television's price-tag — its cost per thousand customers reached.

And the values of television easily bear inspection.

The average cost of reaching customers with an advertising message on network television is \$1.23 per thousand.

This is at least 54% less than any combination of printed media would cost to deliver a message to the same number of people. And television reaches larger audiences than any other mass advertising medium.

We'd also like to report that the average cost per thousand is 8% lower on CBS Television than on any other network.

More viewers for less money is implicit in the cost of an advertiser's message on CBS Television — a price-tag that is manifestly attractive to advertisers since they commit more of their advertising investment to CBS Television than to any other single medium in the world.

CBS TELEVISION

*From the
February 28th
broadcast of
I LOVE LUCY
over the
CBS Television
Network*



YOU SAVE THREE WAYS WITH A CRANE LIKE THIS!

Series "D" 'Load Lifter' All-Electric Cranes surpass average industrial needs, but cost far less than other makes for the same service. The second saving results from the permanent efficiency and economy 'Load Lifter' Cranes put into every load handling operation. Third, these rugged cranes require only minimum maintenance.

Invest in a Series "D" 'Load Lifter' Crane and you get the benefits of standardization and mass production — plus advantages first made famous on "Shaw-Box" Heavy-Duty Cranes. The three-girder bridge doesn't whip or skew. Bridge and trolley wheels are fixed on axles that rotate on antifriction bearings. Motor and drive shaft are permanently aligned. All gearing operates on oil in sealed housings. Accurate spotting is made easy by variable-speed magnetic control, operated by push buttons on floor controlled cranes, and by master switches on cage controlled cranes. Man, load and crane are safeguarded by protective devices.

If you are looking for dependable, economical crane service in the 1 to 20 ton range, write for Series "D" 'Load Lifter' Crane Catalog 221. From it you can easily select one of the three basic types and three trolley styles in the capacity you need.



'Load Lifter' CRANES

MANNING, MAXWELL & MOORE, INC. Muskegon, Michigan
Builders of "Shaw-Box" and 'Load Lifter' Cranes, 'Budgit' and 'Load Lifter' Hoists and other lifting specialties. Makers of 'Ashcroft' Gages, 'Hancock' Valves, 'Consolidated' Safety and Relief Valves, 'American' and 'American-Microsen' Industrial Instruments, and Aircraft Products.



INSULATED holds eliminate need for dehydration, as National Lead's . . .

Liquid Sulfur . . .

. . . books passage on insulated barges for trip up the Mississippi from New Orleans to St. Louis.

The men in the picture above are pouring hot sulfur into an insulated river barge that will keep the sulfur at 260F on its trip up the Mississippi River from Port Sulphur, La.—about 30 miles below New Orleans—to National Lead Co.'s Titanium Div. just south of St. Louis.

Last week, two of these "Thermos bottle" barges completed the long haul in record time—cutting their scheduled run of 8 to 10 days to 5½ days. Each barge carried 2,500 tons of hot, liquid sulfur. It marked the opening of a new venture in Mississippi River boating that may mean considerable savings for National Lead.

• **High Stakes**—The company isn't saying how much it expects to save, but it's obvious that it's sold on the new barges. Coyle Lines, Inc., of New Orleans, which owns the barges, spent \$900,000 on their construction—two 300-ft. long ones, one 280-ft. National Lead itself has spent \$500,000 for insulated storage tanks, docks, and multi-level unloading facilities to cope with variations in the river's level.

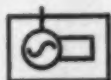
Here's how National Lead expects its investment to pay off:

Most of the company's sulfur comes from Freeport Sulphur Co., near New Orleans. Freeport produces its sulfur by forcing it out of the ground with hot water. In the past, the liquid sulfur was dehydrated when it came out of the well, and shipped dry. At its destination, the sulfur would be stored dry, then reliquefied before use. But in the interim, some of the sulfur dust would blow away—the loss ran as high as

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Rail car, truck trailer
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350 to 1,000 kw.

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explaining investment advantages
of Electro-Mobile Power to:

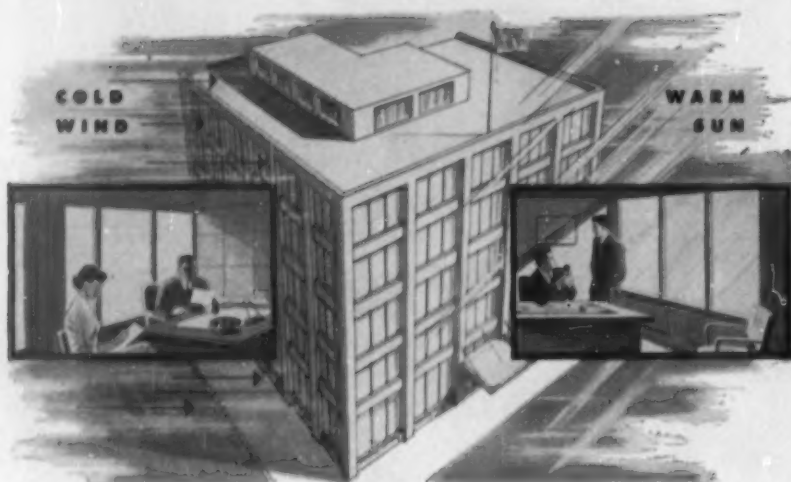
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No Heating Problem



Iron Fireman SelectTemp Heating adjusts automatically to heat loss or gain in each individual room or office

A THERMOSTAT IN EVERY ROOM. When every room is a separate heating zone, a lot of problems that a conventional system can't touch are solved automatically.

Each room takes care of its own heat loss or gain, no matter how much conditions may vary in different parts of a building.

Occupants may have any temperature they choose simply by setting the thermostat in their own room or office. They use only the amount of heat they need. No space is overheated. Nor is there any wasteful heating of unoccupied space. Temperature can be reduced in any unused room, and restored to comfort level within a few minutes when needed. Mail coupon for free catalog and specifications.

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THERMOSTAT IN EVERY ROOM. Temperatures can be varied in every room to fit the "activity plan" and personal preference of the occupants.

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FILTERED, CIRCULATED AIR. Individual room air circulation prevents transmission of odors or bacteria from other rooms. Air is cleaned by a spun glass filter in each room unit. Filtered outside air can be introduced if desired.

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LOW POWER COST. No electricity required to operate circulating fans. Nonelectric thermostats.

LOW INITIAL COST. Easily installed in either new or old construction. Small soft copper tubing (3/4 inch I.D.) carries steam to individual room heater units. Return lines are 1/2 inch. Substantial savings in installation costs.

LOW FUEL COST. Temperature easily reduced in unused rooms. Overheating is eliminated.

AUTOMATICALLY BALANCED. No special adjustments of dampers, valves or orifices required to balance heating system. Each unit continuously regulates heat needed for each room. Automatically compensates for external heat sources such as fireplace or solar heat, without affecting temperatures of other rooms.

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MODULATING ZONE HEATING



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Name _____

Street _____

City, Zone, State _____

14%. Now it can be kept liquid all the way, pumped from well to barge to storage tank to manufacturing tanks.

PRODUCTION BRIEFS

More man-made rubber: B. F. Goodrich Chemical Co. said last week that it was spending \$2.5-million to expand its Hycar rubber production at Louisville, Ky. Hycar rubber shows greater resistance than natural rubber to such things as oil, gas, and chemicals.

Nuclear-powered seaplane: Rear Adm. F. R. Furth, Chief of Naval Research, told a Senate committee last week that the Navy's research program in atomic energy includes design studies of a nuclear-powered seaplane. Atomic-powered flight is under study outside the Navy, too. Also working on it: the Air Force, the Atomic Energy Commission, and the National Advisory Committee for Aeronautics.

Who will make the robots? General Electric Co. opened a plant for production of electronic control equipment last week at Waynesboro, Va. The company says that it is the first new industrial facility of its size ever built specifically for production of automation equipment. GE is planning for expansion already, because it expects demand for electronic control equipment to double by 1961.

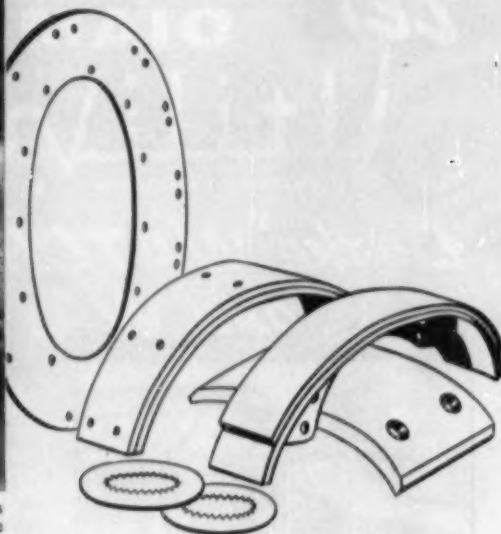
More steel for New England: Northeastern Steel Corp., Bridgeport, is adding 100,000 tons to its mill capacity. Next week, the company will add a couple of 35-ton electric furnaces to its high-grade steel alloy mill. When completed, the new furnaces will boost capacity from present 188,000 tons to nearly 300,000 tons.

Rumor comes true: The Electric Auto-Lite Co. said last week that it would spend \$1.2-million to expand its wire and cable plants at Port Huron, Mich., and at Hazleton, Pa. For weeks, Auto-Lite has been reported to be tooling up for production of 12-volt automobile batteries for Chrysler, its biggest customer. The company confirmed this last week.

Lure them with overtime: Lockheed Aircraft Corp. is talking about overtime pay in its newspaper recruiting advertisements. The company says that its engineers can put in overtime—at their own option—whenever they need extra cash. Its ads claim that an engineer can boost his salary by as much as \$81 to \$142 a month by working five extra hours every week.



For safe brake relines, millions of motorists, repairmen, dealers, truck and bus operators prefer R/M products. For your own protection, insist in the future on one of the R/M brands named below.



Farmers, and millions of other light truck and tractor users, depend on R/M Brake Linings and Clutch Facings because they are built for rugged service and long, economical life.



Heavy duty truck and bus operators prefer R/M Brake Blocks and Clutch Facings. They know they can be counted on for long, economical life and trouble-free performance.

R/M Brake Linings Make Good Traveling Companions

Travel with any of R/M's famous stop-and-go products—brake linings, brake blocks, clutch facings, automatic transmission friction parts—and you travel with confidence. With them you can count on safe, sure, quiet stops; quick, smooth starts; and long, economical wear. Raybestos-Manhattan is the world's leading manufacturer of these products—selling them under the trademarks shown below. They're standard equipment on millions of new cars, trucks and buses—and replacement parts on millions more. They are, however, only examples of the specialized skills at work in R/M's seven great plants and laboratories. Talk to R/M if your problem involves asbestos, rubber, engineered plastics, or sintered metal.

*Whoever You Are . . . Whatever Your Business
An R/M Product Touches Your Life*



Other R/M Products: Asbestos Textiles • Engineered Plastic and Sintered Metal Products • Fan Belts and Radiator Hoses • Rubber Covered Rolls • Bowling Balls • Other Industrial Rubber

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LET DIAMOND UtiliVue

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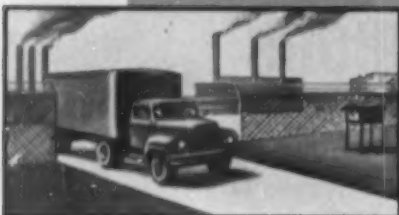
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Processes which are too dangerous for direct observation may be watched safely by "UtiliVue". This includes destructive tests of machines, tests of explosives, atomic operations, etc.



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Many plants have "watching and waiting" jobs scattered around . . . jobs where a man doesn't do anything except watch an operation and report at intervals to a person elsewhere.

The Diamond "UtiliVue" (wired television) can do the watching and waiting, releasing manpower for more productive work. It will watch any process . . . no matter how remote, dangerous or inaccessible . . . and bring a clear image to the observer. It enables him to SEE simultaneously and to coordinate several scattered but related jobs . . . an advantage obtainable in no other way. There can be no mistakes in communications. Get all the facts. Get in touch with your Graybar Distributor or use the coupon below.



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7118

NEW PRODUCTS

Smoother Riding

Rubber hub for wheels, developed by U. S. and German companies, is expected to take jolt out of motoring.

A rubber hub for automobile wheels, devised by Rand Development Corp., and Goetzwerke, big German piston ring maker, may spell safer rides for U.S. motorists. One big auto maker already is planning to put the wheels in some of its 1957 models.

The chassis of an automobile is isolated from the axle by springs. But the axle, solidly fixed to the wheel, gets all the bumps and jars that the road hands out. Automotive engineers say that the less of the auto's weight that's left unprotected by springs, the better the automobile will take the jolts. The Rand-Goetze wheels puts two rubber gaskets between the wheel hub and the axle. This means that the only weight that isn't isolated from direct shock is the weight of the wheel itself.

The two gaskets are thin rubber rings. The inner circumference of each ring is fixed to the axle; the outer circumference attaches to the tire rim. This arrangement helps to protect the automobile, from the axle on up, against up and down and sideways jolts.

The manufacturer planning to use the new wheel hasn't said how much it's going to cost the customer. But Rand believes the cost to the manufacturer won't be any more than the cost of a conventional set of wheels.

• Source: Rand Development Corp., 12720 Lake Shore, Cleveland.

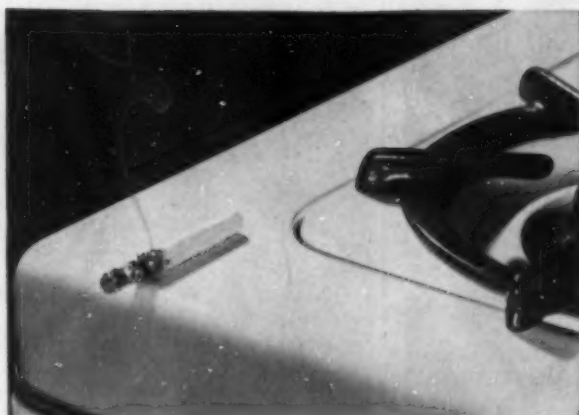
Cheaper Blasting

Maumee Collieries, Terre Haute, Ind., has developed an explosive that is said to cost about half as much as conventional types—and to be safer to handle in the bargain.

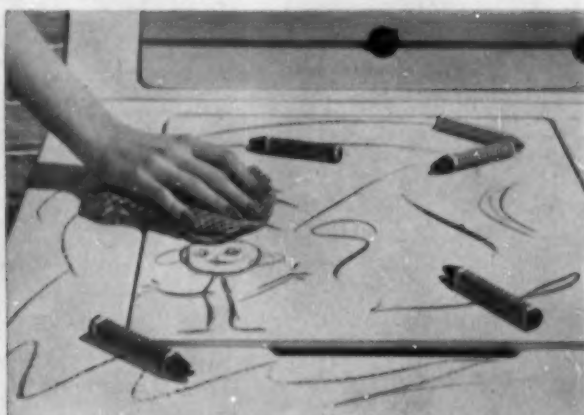
The development is significant because strip miners have to be certain that the cost of drilling and blasting the rock and dirt that covers the coal won't eat up the profits they get from coal. If too much overburden has to be blasted, the price of the explosive needed for the job may make the whole venture impractical.

Maumee is licensing the manufacture of Akremite to other coal miners. Basically, it's a simple job of mixing the two ingredients—commercial grade ammonium nitrate and carbon black—then

PORCELAIN ENAMEL in your products would pass all these tests...



HEAT TEST. The red-hot embers of a burning cigarette don't damage the rock-like surface of porcelain enamel. Its glistening finish does not scorch or discolor as many kitchen surfaces do.



LIPSTICK TEST. Lipstick or children's crayons won't mar the hard, lustrous finish of porcelain enamel. A damp cloth quickly wipes away stains and dirt leaving the surface bright as new.



SHOCK TEST. A hot iron is placed on an ice-cold porcelain enamel drainboard. The sudden, shocking temperature change does not affect it. Many coatings would blister, buckle or discolor.



SCRATCH TEST. Vegetables or fruits for a salad can be cut on porcelain enamel without damaging the surface. Many work surfaces show dents or scars from knives or other sharp utensils.

If you make products that might benefit from the sales advantages of porcelain enamel, why not consider this lifetime finish the next time you redesign? Then you can offer products in a range of colors that don't fade or lose luster.

Experienced job enamellers are ready to work with you—not only on design problems but in the production of porcelain enameled parts. For nearly half a century many of these enamellers have specified Armco Enameling Iron as the base metal for their products. They know it is assurance of uniform quality from one shipment to the next. That's why it has become known as the "World's Standard Enameling Iron." Just fill in and mail the coupon for complete information.

ARMCO STEEL CORPORATION, 375 Curtis St., Middletown, Ohio

Give me names of job enamellers

We manufacture _____

Name _____

Company _____

Street _____

City _____ Zone _____ State _____



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MIDDLETOWN, OHIO

SPECIAL STEELS

SHEFFIELD STEEL DIVISION • ARMCO DRAINAGE & METAL PRODUCTS, INC. • THE ARMCO INTERNATIONAL CORPORATION



Want more people to buy your product?

There are two proven methods for expanding your sales. Both are being used with eminent success by prosperous businesses.

1. Increase the number of people who prefer and use your product — and who tell their friends about its advantages.
2. Reduce the number of people who undervalue your product because they are inadequately informed.

You can progress toward both these goals with the help of well-printed, well-circulated printed pieces.

How Printed Pieces Work for You

Good printed pieces can explain why and how your product delivers greater benefits — and thereby make sales for you. Good printed pieces can prompt your customers to recommend your product to others, thus combining the authority of the printed word with the power of word-of-mouth advertising.

Furthermore, good printed pieces can erase prejudices created by ill-informed gossip. By fully explaining, illustrating and documenting the facts of your superiority, both major and minor, your story in print can set people straight and correct false notions that too often divert sales into competitive channels.

Your Ally — A Good Printer

No matter what form of selling literature you need — booklets, brochures, broadsides, bulletins, folders, reports, manuals, house organs, catalogs — you first need a good printer. And you need him as part of your working staff right from the start.

Only when you call him in at the beginning of your planning can he save you most in time, effort and money. Then he can most effectively apply his unique skills and techniques. One thing is practically certain: He will specify Warren's Standard Printing Papers for your job, for a good printer knows Warren papers deliver brilliant printing results with uniformity and economy. S. D. Warren Company, 89 Broad Street, Boston 1, Massachusetts.

BETTER PAPER — BETTER PRINTING
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Warren's
STANDARD
Printing Papers

packing the product into polyethylene bags. Maumee buys rolls of polyethylene tubing of a diameter to fit its drill holes, then cuts off sections of the size that will hold the desired charge.

• **Economical**—Cost of the ingredients themselves is about half the cost of conventional explosives. But the new mixture is also less expensive because neither of its ingredients is considered to be an explosive; so neither has to carry the high freight handling charges put on conventional fixed explosives. One Maumee licensee, Robbins Coal Co., Blount County, Ala., has found Akremite so economical that it uses extra heavy charges that not only loosen the overburden, but actually blast up to 30% of the dirt completely out of the way. This saves the cost of moving the debris by mechanical methods.

• **Safe**—Safety-wise, the reports so far seem to indicate that Akremite is much safer than dynamite. The new explosive has been shot full of rifle bullets, burned, pounded, and generally man-handled without going off.

To set it off, Maumee recommends a combination of electric detonating cap, explosive fuse, and a primer charge of gelatin high explosive that packs the same punch as an equal amount of dynamite made from 60% pure nitroglycerine and 40% inert materials. It takes 12 lb. of this primer to set off 200 lb. of Akremite.

• **Source:** Maumee Collieries Co., 444 So. 6th St., Terre Haute, Ind.

NEW PRODUCTS BRIEFS

Colorful conveyor belts are being turned out by B. F. Goodrich. Some are made from materials that have been allowed to keep their natural colors; others are colored specially. One has a shade of green that Goodrich says reduces eye strain, increases inspection efficiency.

• **Typed cards** can be used to set up alphabetical listings, using Photo-List, a machine developed by Ralph C. Coxhead Corp., 720 Freylinghuysen Ave., Newark 5, N. J. The \$12,000 machine takes cards typed on a Vari-Typer, photographs them, arranges them in columns, and turns out a photo negative that can be used to reproduce the lists by a standard photo-offset process.

• **A porcelain finish** that looks like copper has been developed by Pemco Corp., 5601 Eastern Ave., Baltimore 24. The maker says that one firing of the new Coppertan finish, applied to a steel surface, gives a surface that won't tarnish or scratch.

Have you noticed how much you use **ARGON** lately?

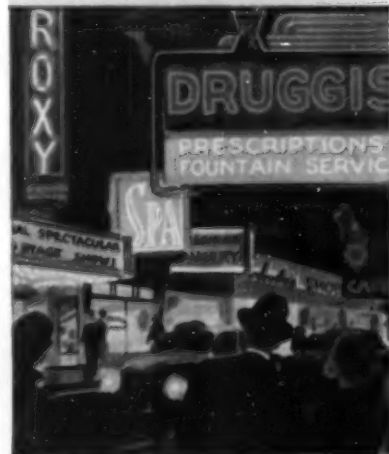
FOR YOUR HOME



FOR YOUR HEALTH



FOR YOUR SALES



Industrial gases play important parts in everyone's daily life, parts frequently unsuspected. Argon is quite typical. Did you know argon has saved *you* a lot of money? It has . . . because the makers of incandescent lamps now fill their bulbs with argon. Filaments operate at higher temperatures, are so much more efficient that experts say this one use of argon saves the American public over 100 million dollars a year in bills for electricity. But your offices and factory probably use fluorescent lights as they provide many times the illumination per dollar. Only the use of argon in fluorescent tubes made them practical realities!

Do you and your family get needed vitamins and keep that healthy tan with a modern sun lamp? That lamp *must* be filled with argon. When you have your car battery recharged, argon is working for you. The charger's rectifier bulb *must* be filled with argon. And neon signs must have a place in your life; even the smallest town has many of them. In the newest type of neon tubes, argon is used *with* neon. Someday you will fly in jet airliners. Engine parts will be made of the new wonder metal, titanium, and stainless steels . . . just as they are today for military jets. Argon is a "must" for processing and fabricating these metals.

To keep step with the growing demand for argon, the NCG supply has recently been greatly increased. Further increases will be made as the need continues to climb. If you are a user of any industrial gases: oxygen, acetylene, hydrogen, nitrogen, helium, argon, or carbon dioxide, rely on NCG . . . for able counsel and dependable supply. Your inquiries will receive prompt attention. Write today.

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Some of the first companies to begin the electric motor switchover were the nation's machine tool builders.

When the electric motor re-rating program was announced in 1953, industry might have balked. But today, 7 out of every 10 motors bought are built to the new specifications. What has caused industry to make . . .

The Big 'Motor Switchover'

The first in a series of articles by ARTHUR F. VINSON, Vice President—Manufacturing, General Electric Co.

JUST two years ago, industry was told that electric motors between 1 and 30 horsepower would be re-rated, built to new dimensions. It would mean an eventual "switch-over" for everyone who used motors in this horsepower range—a switch-over that motor users might be expected to resist. Yet today, 70% of all motors sold by General Electric in the newly released ratings are built

to the new standards. What is causing industry to convert from motor standards that have remained essentially the same since 1929?

To find the answer we have to understand (1) why motors were re-rated in the first place, and (2) what improvements were made possible.

After World War II, increased production created a demand for

more powerful machines with greater speeds and increased capacity. Also, some companies needed machines that were smaller, lighter, and more flexible. It soon became obvious that motors built to 1929 standards were no longer adequate.

NEMA Starts Work

To meet these new demands, motor manufacturers, members of the Na-

tional Electrical Manufacturers' Association (NEMA), started work on new standards that would permit more powerful, more compact electric motors.

291,745 Design Hours

At the same time, General Electric began working on a new motor design. More than a man-century (291,745 hours) of research, engineering, and development went into the project. The design they came up with packed more horsepower in a smaller frame, eliminating waste space without sacrificing active materials such as magnetic steel and copper.

The really important news about this new design, however, was not the waste space that had been taken out, but rather, the new materials that went into it.

Something New Added

G.E. called the new motor the Tri-Clad® '55'. It featured new "miracle" materials never dreamed of in 1929; such materials as DuPont's Mylar® polyester film, a new insulation which is eight times stronger than anything previously used; a silicone Dri-Film® dip that makes insulation shed water like a tin roof; a new synthesized grease with more than four times greater lasting power.

While they were at it, G-E engineers reduced many of the major causes of motor noise. They also wrapped the enclosure around the motor more completely, giving 60% greater protection against moisture, dust, and dirt. When they were through, they had a motor that could take a lot of abuse and still give longer service than any motor previously built.

Industry Hesitates

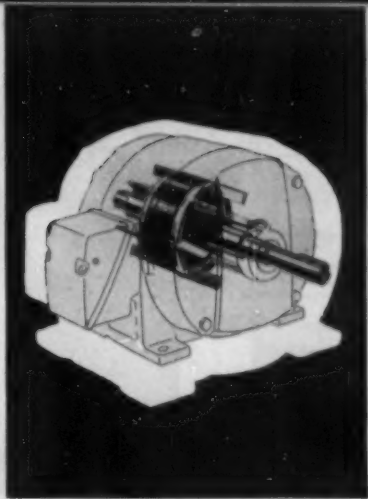
Now the new motors were ready for market. At first, motor users hesitated. They had questions they wanted answered:

"What are the advantages to us? How do we plan our conversion program? Why convert when the old motors are adequate?" The new motor itself answered these questions.

Mr. W. J. Conery, chief design engineer of F. E. Myers & Bro. Co., Ashland, Ohio, was one who quickly saw what higher full-load speed, smaller size and weight, and modern appearance could mean to Myers' Centri-thrift and Ejecto pumps. He said, "The Tri-Clad '55' is the best performing motor G.E. ever built."

The Kvalheim Machinery Co., Petaluma, Cal., found that by using the new Tri-Clad '55' motor on their Kval saw, they could reduce the size of the drive system and save \$120 in belts, pulleys, and a counter-shaft on every unit. The old system had used a 3600-rpm motor, geared

†DuPont trade-mark.



Though new G-E motor is up to 40% smaller and lighter, vital operating parts such as the rotor are same size.



Protection from moisture, dirt and dust is 60% better in the new G-E motor because frame is more fully enclosed.



The F. E. Myers & Bro. Co. reduced size, upped operating speed of Centri-thrift (left) and Ejecto pump (right) when they switched to G.E.'s new motor.

down to 1800-rpm with belts and pulleys because the old 1800-rpm motors were too big. The new G-E 1800-rpm motor fits perfectly and drives the saw with a single belt. Owner A. A. Kvalheim, reports, "It means a great maintenance saving to our customers—fewer worn-out belts and longer, more continuous service."

The Switch Began

Industry soon began to swing to the new and better motor. Progressive equipment manufacturers re-designed their equipment to take advantage of the new standards. Motor users began discovering savings in handling, stocking, and installing new motors—based on an orderly transition program. They replaced worn-out motors with the new design, and, in addition, they specified them on all new equipment ordered. And all buyers appreciated the fact that in many 1 to 5-hp ratings, they could buy the new G-E motors for 5% less.

Still some are holding back. Those buying "old standard" motors are missing the opportunity of making an early transition to the motor standards of the future. Equipment builders who haven't made the change-over are missing out on important competitive advantages.

As one engineer said recently, "To go on buying the old motor is like buying a 25-year-old radio just because it's bigger. You're spending more money for a product that is old-fashioned in design, less efficient in performance, and lacking in engineering improvements."

What is your company's policy? Are you investing in progress or obsolescence?

640-37

Progress Is Our Most Important Product

GENERAL ELECTRIC

*Reg. trade-mark of General Electric Co.



CUSTOMERS are no problem for the A. T. Henderson travel agency. More turn up every year.



PHONES are almost as essential as customers. This ambidextrous girl handles airline reservations.

Travel Agency: Harassed Guide

A. T. Henderson Co., Inc., a travel agency, consists of 16 people. It occupies a 2½-room office half a block from New York City's Grand Central Station. With this small force and from this niche, Henderson manipulates a huge and nightmarish tangle of affairs that stretches around the world.

It is a monstrous, quivering complexity that, to the casual observer, seems likely to collapse at any moment. It is built on timetables, which are subject to change without notice. It depends on scattered deputies remote from supervision, who humanly err. At many points it hangs by such tenuous threads as a memorandum written in some distant land that dislikes paperwork, scorns the business efficiency familiar to Americans, and disregards clocks.

What's more, it is getting steadily bigger and more complicated. More Americans travel to more places every year. Proportionately more each year move through travel agents. The result is that Henderson's tangle of affairs grows increasingly hard to handle.

Yet, somehow, it all holds together.

The task of seeing that it does, and of making money in the process, is the business of a travel agent. Here is what the business is like.

I. Time and Space

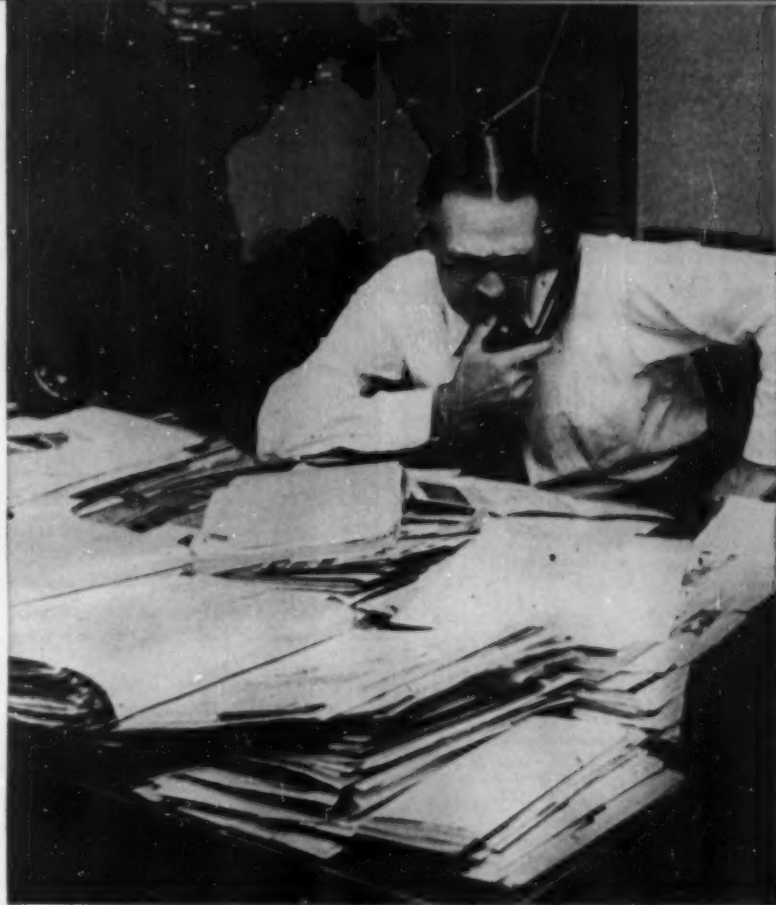
As companies go, Henderson is small. As travel agencies go, it is big.

The American Society of Travel Agents, Inc., of which Henderson is a member, last week published a monumental survey of the industry worked out by a New York management consultant firm. The survey shows that of ASTA's 1,000 U.S. and Canadian members (who represent roughly half of all travel agents in the two countries), about three-fourths handle \$1-million worth of travel or less annually and have six or fewer full-time employees.

This makes Henderson larger than average. It handled about \$4-million worth of travel last year. It dispatched, or had a hand in dispatching, some 15,000 people in various directions across the face of the earth.

• **Challenge**—This took a vast amount of work, for the world is a large and complicated place. Henderson's 16 people make about 30,000 telephone calls a year and mail some 50,000 letters. They work in an office whose keynote is paper—huge stacks of it, everywhere, in staggering disarray. Filing cabinets bulge. Wastebaskets overflow. The manager of the foreign department, a harassed Frenchman named P. M. Barbet (picture, above), has so much paper on his desk that he has given up any attempt to clear it. He merely tries to keep the paper in orderly stacks. The desktop itself is invisible.

Henderson's president and owner, Herbert H. Robins, sits fairly calmly in a small office leading off the main one. The general manager, Alfred F. Schmeiss (picture, page 86), sits much less calmly in a corner of the main office. A huge map of the world adorns the wall behind him. Schmeiss occasionally glances over his shoulder at it. The world stares back at him fixedly, as though challenging him to stay in business.



PAPER—a third requirement—floods the office. This is P. M. Barbet, harried manager of Henderson's foreign travel department.

in a Global Maze

• **Aspects**—Henderson is both a retailer and a wholesaler of travel. As a retailer, it sells travel directly to the wandering public. As a wholesaler, it makes up its own tours and cruises to such places as Florida and the Caribbean Islands, and sells space on the expeditions to other agents. It is also general agent for Swedish Lloyd Steamship Co., on whose ship *Patricia* it regularly runs cruises during the winter.

The essence of its business is to make the world simple for travelers. "The only thing we have to sell," says Schmeiss, "is time and service." Henderson handles the same tickets to the same places as other agents. It can compete only with service—and, to a lesser extent, with price.

A customer who wanders into Henderson's office is told that anything he might want in the way of travel can be had right here among these phones, these experts, these chaotic piles of paper. He can sign onto one of Henderson's tours. He can have Henderson book him into some other company's tour to somewhere else. Or, wallowing

amid travel folders and scratch pads at a salesman's desk, he can work out his own tour. He can have anything from a simple business trip to a \$5,000 ramble through Europe. He can buy merely the bare bones of travel, or he can have Henderson arrange every detail down to baby-sitters and opera tickets. Says Schmeiss: "We'll give them anything they want—as long as they're willing to pay for it."

• **Finances**—The amount the customer pays depends on many things. The bulk of a travel agency's profit comes from commissions paid to it by "principals"—airlines, hotels, and the like—and by tour operators, or wholesale agents, to whom it sends customers. These commissions vary from 5% to 10% of the ticket or room price, depending on the season and on the policy of the principal. A tour or cruise operator works either by collecting commissions from principals in the same way as a retail agent, or by chartering an entire ship or bus fleet outright.

Since an agency's profit comes largely from commissions, a customer seldom



Ever seen a flight of ducks and wonder how far and how fast they were traveling? At best, you could only hazard a rough guess.

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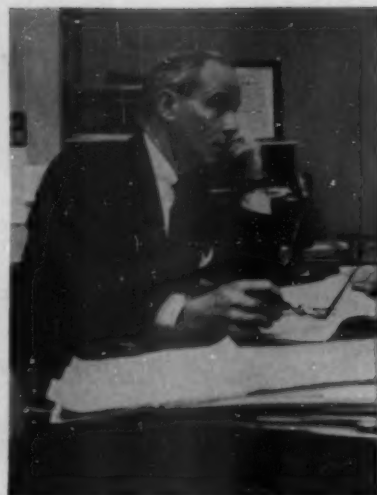
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VETERAN Alfred Schmeiss has worried about timetables and profits for 25 years.

has to pay more than if he arranged the trip by himself. He may even pay less — especially if the agency has managed to get a hot bargain on commissions, or is in sharp competition over a certain travel route with other agencies.

If the customer asks the agency to work out a complicated itinerary, however, he may have to pay a service charge. This is also true of certain types of rail and air trips on which no commissions are paid. Some agencies say they never levy service charges; Henderson levies one whenever the economics of the situation calls for it. For instance, a labyrinth-like European trip it arranged for two businessmen not long ago involved over 150 letters, order sheets, and other miscellaneous papers—not counting carbon copies. This order carried a service charge.

• **Equipment**—What does it take to set up in business as a travel agent?

First of all, recognition by the principals. Some hotels and carriers—especially in foreign countries—do business with anybody who sends them customers. But most U. S. principals require that you prove to them, usually through their industry associations, that you are financially responsible and capable of handling your business soundly. You can then get carriers to issue stocks of tickets to you; you sell the tickets direct to your clients, subtract your commission, and send the money to the carriers.

Next, you need vast stores of information on all the intricacies of travel along all highways and byways of the travelable world. To keep this information on hand, you collect travel folders, maps, timetables, pamphlets, addresses, and phone numbers much as a stamp collector collects stamps. It is also a good idea to get hold of a man like Henderson's P. M. Barbet, who can



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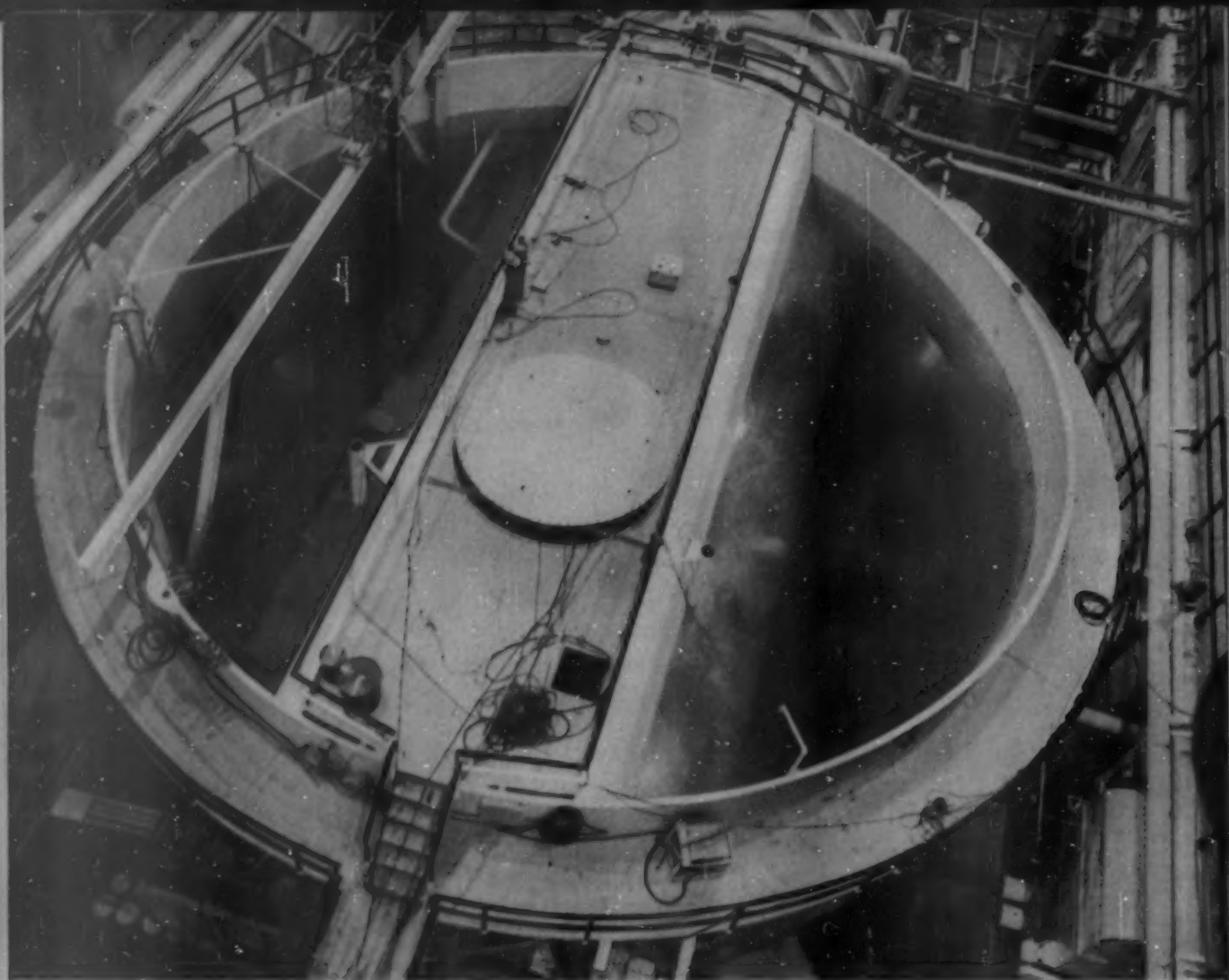
Globe-Wernicke Techniplan's modular principle imparts such great flexibility to planning that you can "tailor-make" your office to your own requirements. For example, you can select from many types and sizes of partitions to provide sections or departments with any degree of privacy, which encourages higher production by reducing distractions of sight and sound. In addition to practical, money-saving considerations, you'll like Techniplan's modern, business-like appearance.

Globe-Wernicke Techniplan, the original modular steel office equipment, scientifically integrates work stations so that all available space provides maximum utility. With skillful arrangements, Techniplan will bring unparalleled efficiency and pleasant working conditions to any office. Ask your Globe-Wernicke dealer, listed in the phone book's "Yellow Pages" under "Office Furniture", for full details on Techniplan. He'll gladly help you work out arrangements. Or, write us direct.



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Atomic reactor built by Westinghouse for AEC is in this land-locked submarine hull at the National Reactor Testing Station in Idaho. It went into operation May 31, 1953.

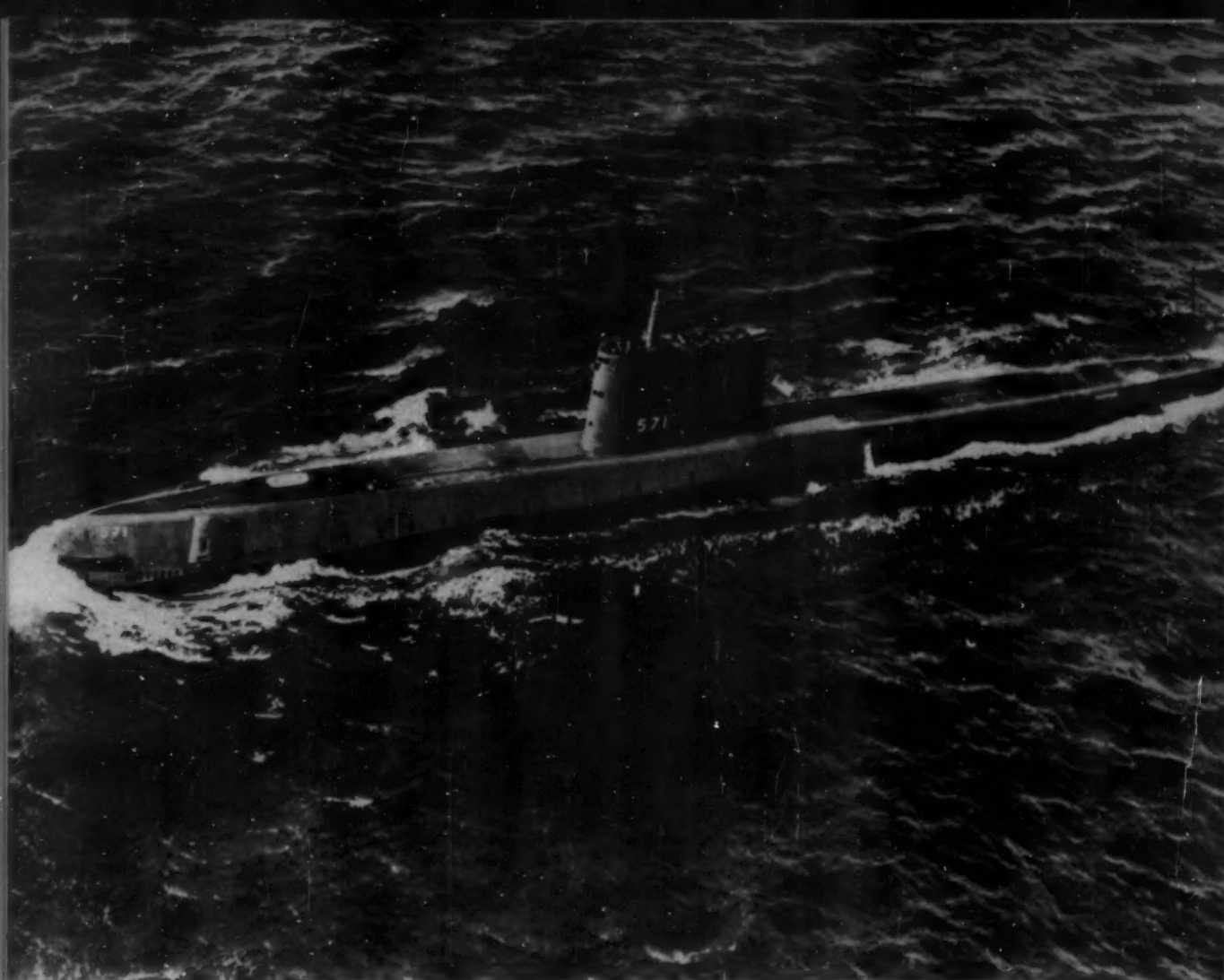
2 FULL-SCALE ATOMIC POWE

*Westinghouse built
both of them*

The *first* full-scale nuclear power plant designed, developed and built specifically to produce large amounts of usable power, was built by Westinghouse for the Atomic Energy Commission and the U. S. Navy. It has been operating successfully, at the National Reactor Testing Station in Idaho, for almost two years.

The *second* full-scale nuclear power plant designed, developed and built specifically to produce large amounts of usable power, was built by Westinghouse for AEC and U. S. Navy. It powers the revolutionary submarine, *Nautilus*, which has joined the fleet after dramatically successful undersea trials.

To the United States Government and American industry, Westinghouse offers a unique combination . . . The most advanced knowledge in nuclear development plus many decades of accomplishment in the power generation field.



The Nautilus, first atomic sub. It is propelled by an atomic power plant built by Westinghouse for AEC and the U. S. Navy. It went to sea January 17, 1955.

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FIRST industry-owned reactor for testing and developing materials and fuels for atomic power plants... to be built by Westinghouse at Blairsville, Pa. Announced April, 1955.

FIRST atomic engine to drive submarine went to sea January 17, 1955. Westinghouse now working on atomic engines for two additional submarines.

FIRST atomic reactor for full-scale peacetime electrical generating power plant in the U. S. is now being built by Westinghouse for AEC; reactor to be operated by Duquesne Light Co., Pittsburgh, Pa., which also will build and operate the electric generating portion of the station.

FIRST contract to develop atomic engine for large surface ship... awarded to Westinghouse, October 15, 1954.

FIRST privately-financed factory devoted exclusively to building parts for atomic power plants, at Cheswick, Pa. Started operation December, 1953.

FIRST substantial quantities of controlled atomic power produced at the National Reactor Testing Station, Idaho, May 31, 1953. Reactor built by Westinghouse for AEC.

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not only understand timetables, but can also light the way through dark mazes of international red tape.

You also need deputies in other lands and cities. These deputies are most often other travel agents with whom you have working agreements. They meet your clients at ports and airfields and rail stations, arrange for flowers in hotel rooms, and perform other services that can't be handled easily by remote control.

Some very big travel companies—American Express Co., for instance, and Thos. Cook & Son, Inc.—have no need for such deputies. They have their own offices and their own employees scattered across the world. A many-armed organization such as American Express is able to keep its world operations under more direct control than a smaller agency.

II. Multitudes

Ten years ago, in 1945, A. T. Henderson Co. consisted of two people—Robins and Schmeiss—and handled \$200,000 of business. Its growth since then has run alongside an equally spectacular growth by the entire travel industry, throughout the non-Communist world.

Almost any set of statistics you pick talks of growth:

- In 1948, according to the European Travel Commission, some 183,000 U.S. citizens went to Europe. Last year, the figure was 460,000. This year, it is fully expected to hit half a million.

- Puerto Rico earned \$5.6-million from visitors in 1948. It earned \$23-million in 1953.

- Britain, which has doubled its earnings from foreign travelers since 1948, now counts tourism as its No. 1 dollar earner.

- **Reasons**—Behind these jumping statistics are many intertwined causes. The world's population is growing. Prosperity is on the increase. In many countries, workers are steadily hammering out longer vacations. Transportation is faster—allowing people to travel on relatively short vacations, and inducing businessmen to travel where before they might have relied largely on phone calls and letters and cablegrams.

Another factor in the picture is a new, energetic interest in travel on the part of governments. They value travel, especially pleasure travel, for its diplomatic as well as economic benefits. The fostering of world tourism is a major point in Pres. Eisenhower's foreign policy. Other countries are working hard to make themselves attractive to visitors. South Africa, Australia, India, Britain, Germany, France, and Belgium are all deep in plans to modernize

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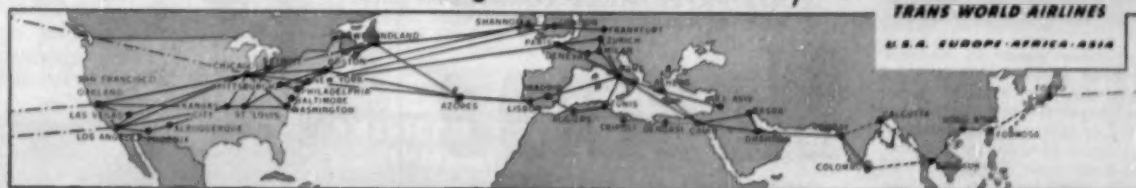
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and improve their railway systems. They, and other countries, are working hard to meet a towering demand for medium-priced hotels. A multitude of countries, some of them represented by such groups as the European Travel Commission and the Caribbean Tourist Assn., maintain offices in the U.S. for the specific purpose of stirring up travelers.

• **Promotions**—The travel industry itself, too, has been laboring mightily toward the same end. Most of its effort in the past 10 years has been to reach down into ever lower income strata, to develop markets among people who previously did not travel because they could not afford to.

The most-publicized move on this front last year was the development of a system by which travel can be bought on credit, much like a washing machine. Pan American World Airways introduced the system in May; other airlines quickly picked it up. Pan Am's report on the system's maiden year reads like this: Some 7,000 people bought \$4-million worth of travel on credit. This represented 3% of Pan Am's U.S. sales.

There was a good deal of tremulous muttering at the inception of this system; it was feared that the customers, not having bought anything that could be repossessed, would default gleefully and in large numbers. This has not been the case. Pan Am says that none of its 7,000 has defaulted. Through the whole airline industry, there are reports of only a few people whose payments have not come through. Even these people have fairly legitimate excuses. One is reportedly in jail; another is in a mental institution.

This idyllic experience is explained most often by reference to the very fact that there is no collateral, no merchandise to be repossessed. A man who buys a television set knows that, if he defaults, the worst that can happen to him is loss of the television set. This, though sad, will not be tragic. In the case of travel, he does not know what his fate might be. He might envision himself in jail, crippled financially; his family weeping in the street. The vision makes him pause to make sure he will be able to handle the payments.

• **The Masses**—The travel credit system is one more extension of the trend toward making travel easier on the family budget. Airlines, ships, and railroads have been stressing less-than-luxury travel and have found the response huge. In 1954, for instance, roughly half of all international air passengers went by tourist class.

Cheap, mass travel in the form of packaged tours and cruises has been a success almost continually since its earliest days. Schmeiss of A. T. Hen-

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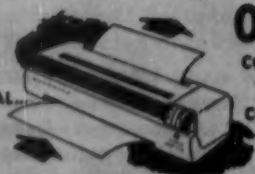
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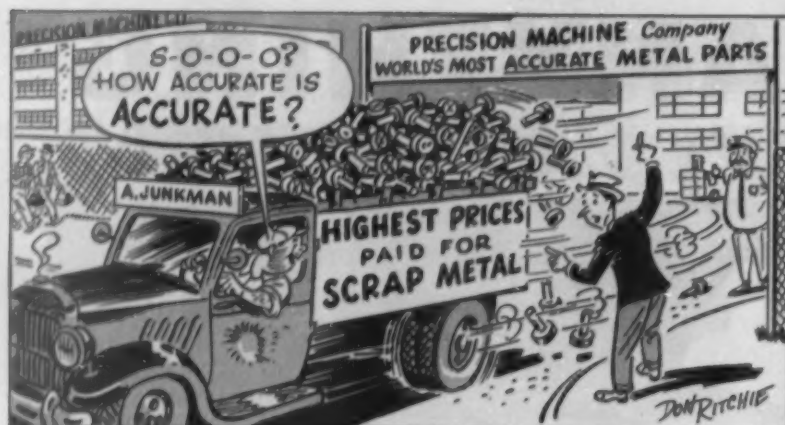
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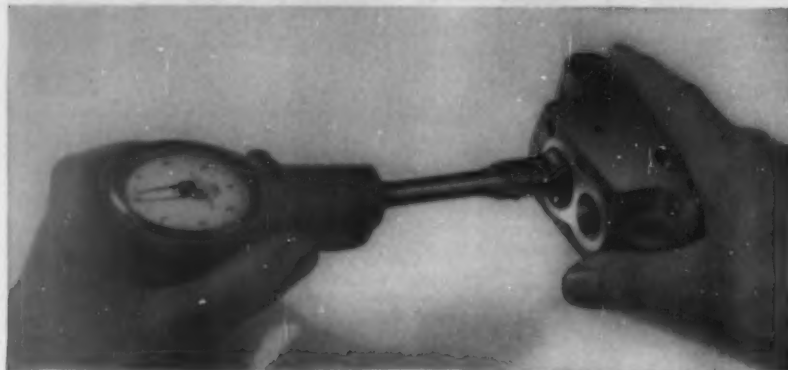
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derson recalls that it succeeded even during the Depression.

One of the earliest popular-priced cruises was run in 1930 by a travel agent named Ralph Dellevie, whose name is now legend. Atlantic liners in those days lay rusting in port during much of the winter, and Dellevie was able to charter three of them at ridiculously low rates. His idea was to run short, cheap cruises on them. The ship companies scoffed; it was an axiom that only long, carriage-trade cruises paid off in the winter. They did not then know the potentialities in cheap travel. Dellevie got so many customers that he had to convert grain bins into passenger rooms.

• **The Tour—Cheap,** off-season land tours are equally easy to sell. Back in 1939, Robins and Schmeiss decided to try an experiment with Florida, whose resort season at that time was very short. Hotel and rail rates off season were so low that Robins and Schmeiss were able to offer a packaged 10-day Florida vacation at \$55.

Their fantastic hope of getting 75 customers was viewed with great mirth in the trade. They got 800. Other agencies picked up the idea. The result was that 4,000 people gathered for what turned out to be one of the most frantic tours in the annals of mass travel.

The railroads had to dust off old passenger cars that had been morosely disintegrating in storage yards. They had to convert baggage cars into lounge cars. Each train stopped at the Miami Beach station only long enough to dump people and baggage onto the platform, then pulled out in panicky haste to let the next train in.

Miami Beach, unable to believe that 4,000 people were coming, was not ready to handle them. There weren't enough facilities to take care of the baggage. It was raining. The hotels didn't have enough rooms ready. A feeble attempt to get baggage and owner to the same hotel was given up in despair. After a while, groups of friends and even families were split up.

Robins and Schmeiss sat facing each other in a hotel room that night, convinced that their careers as travel men were over. "It seemed like the end of the world," says Schmeiss. Actually, it was merely a hint of big things to come. It was a clue to the size and bursting ripeness of the market for cheap travel.

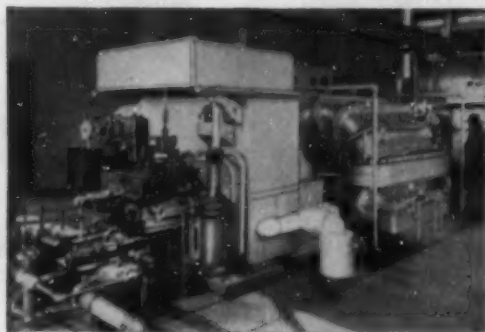
• **Ahead—**"We've hardly begun to tap the market even yet," Schmeiss says. "We do more business every year. This summer looks like a lulu."

He glances over his shoulder at the world map behind him. The world stares back. Across the room, the harassed Barbet slowly disappears behind a vast mound of paper.



NIGHT VIEW of Cities Service Refinery, Lake Charles, La.

Steam turbines can't break down here — or else...



NEVER-FAILING POWER for catalytic-cracking installation comes from this Worthington high-speed steam turbine —used whenever continuous operation is vital.

You're looking at a catalytic-cracking installation, where "or else" can add up to \$12,000 a day!

When crude oil is converted into gasoline, product quality is completely dependent on continuous, month-to-month, even year-to-year operation of every piece of equipment used in the process.

Prime movers in most cat-crackers are high-speed steam turbines (as high as 12,000 rpm) used to drive huge blowers and compressors. These — above all — must not fail. And it's exactly for that reason that Worthington high-speed turbines are the overwhelming choice of the petrochemical industry. In fact, more Worthington high-speed turbines are used than any other.

Strange news coming from a firm whose reputation was built on pumps? Not to America's leading names in business and industry. They know Worthington as a major source of practically every kind of precision machinery — air-conditioning systems, construction equipment, Diesel engines, compressors, steam turbines and, of course... pumps. Worthington Corporation, Section 5.5, Harrison, New Jersey.

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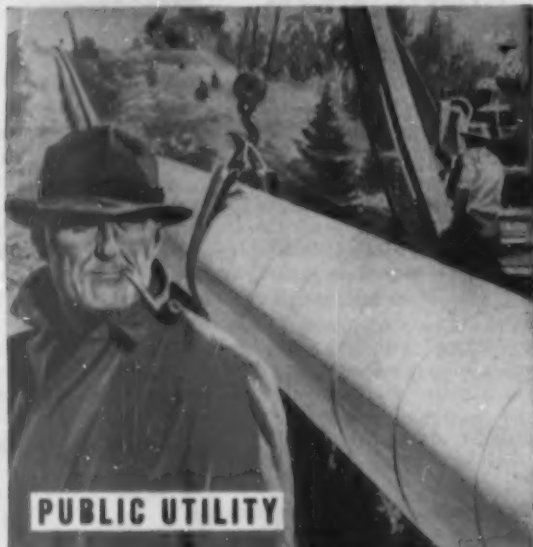
of Free Competition versus Regulation and Controls in the nation's sixth largest industry... and why it concerns the gas consumer.



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PUBLIC UTILITY

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C. THOUSANDS OF COMPETING GAS PRODUCERS

There are more than 8,000 producers competing to find gas and sell it.

Competition Serves Consumers Best

In the Production of Natural Gas or any Other Product

Where business has an exclusive franchise there is reason for regulation. Where many compete, competition best serves the public interest.

In the natural gas industry, pipelines and local distributors, because they have exclusive franchises, have long had their rates regulated. Producers' prices were not so regulated because more than 8,000 of them compete vigorously to find gas and to sell it.


Now these producers have been singled out for Federal controls and price-fixing. It is a step without peacetime precedent—to price-fix a commodity at its source.

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Controls are dangerous because they could easily be the first step toward Federal price-fixing of coal or oil—or lumber or grain or your business.

Controls are unfair because they single out one competitive industry for such controls.

Controls are shortsighted because they stifle the bold and risky exploring that is needed to assure adequate supplies for the future.



***Protect the Public Interest
Through Free Competition***

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NAMES & FACES



LEONARD WOOD HALL:

GOP's Promoter-in-Chief

The smart, modern headquarters of the Republican National Committee in Washington is bustling with activity—a state highly abnormal in a non-election year. Volunteer women workers buzz over stacks of mail. Survey teams check in and out. New campaign techniques are appearing at a production line pace. Everybody is in conference, and everything is stepped up.

The man responsible, Leonard Wood Hall (picture), is a congenial extrovert who exudes energy from every ounce of his 200-lb. football coach figure. As Chairman of the Republican National Committee, Hall acts like a football coach as he roams the offices, peppering up his players. Hall isn't a

zealot, but he is dedicated to building a majority party in the image of Pres. Eisenhower.

"We're now doing," he says, "what we normally would be doing in May or June of next year."

Specifically, Hall has survey teams on the prowl in five states, trying to find out why those states were lost in 1954. He wants to know if it was lackluster candidates, slipshod organization, lack of issues, peculiar local conditions, or what? Have these problems been overcome? Is factional feuding sapping organization efficiency? Are strong candidates being lined up who will televise well? He wants organizations working smoothly, with rosters of

attractive candidates lined up well ahead of the primaries next spring.

I. Scrub Work

While the survey teams do their work, Hall pushes his No. 1 objective: convincing Eisenhower that he must run in 1956.

Meanwhile, Hall must cope with intra-party headaches such as the firing of Edward Corsi, which threatens to alienate the Italian vote in New York. Democratic leader Carmine G. De Sapio, who competes with Corsi for influence among the Italians, apparently feels he has a pay-dirt issue and isn't going to let it die. Others, such as Sen. Irving Lves, feel that by election time the incident will have lost its impact. But it is the kind of thing that keeps Hall awake nights.

Patronage has been another bugaboo for Hall. Political jobs never flow fast enough after a party has been out of power, and the shifting of many political appointees to protected Civil Service status by the Democrats before they went out of office has made it even tougher to shake loose the patronage plums.

Patronage got fouled up in the early days of the Administration—before Hall took over—when Presidential Assistant Sherman Adams tried to ride herd on job plums. Another snafu that Hall had to clear up was the appointment of Cabinet officers without first clearing with state and local leaders.

• **Diplomat**—The chairman must be adept in the art of compromise and in bringing together divergent groups. Many thought Hall was overcautious in his dealings with Sen. Joseph McCarthy last year. But his approach was consistent with his role as chairman. "As long as McCarthy fights Communism, I'm all for him," Hall said at the time. "But when he fights those who fight Communism just as conscientiously as he, then I can't go along with him." Hall's break with McCarthy dates from the time the senator took on Gen. Zwicker, Secretary of the Army Stevens, and Army Counsel Adams.

• **Applause**—Most Republicans think Hall is doing a good job. Some think he's the best chairman since Will Hays in the 1920s. This group points out that Hall is a natural for the job. He has a knowledge of precinct and courthouse politics equaled by few chairmen—he's still a precinct committeeman and town leader of Oyster Bay, Long Island. His political instincts are rated high—knowing when to move, when to make a fight, and when to hold off.

The Old Guarders who don't trust "that White House bunch" carry their problems to Hall. And the "palace guard," which has come to recognize Hall as a skillful pro dedicated to the



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The most economical truck engine on the road today, the Mack-built Thermodyne® Diesel delivers more miles per gallon than any other engine handling like loads. It's a big reason why more Mack diesel trucks are bought each year than any other make.

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Trucks that won't bog down under the most adverse conditions of mud, gravel or sand . . . because of traction supplied by famous Mack-built four-wheel-drive rear axle assembly combined with exclusive Mack Power Divider.

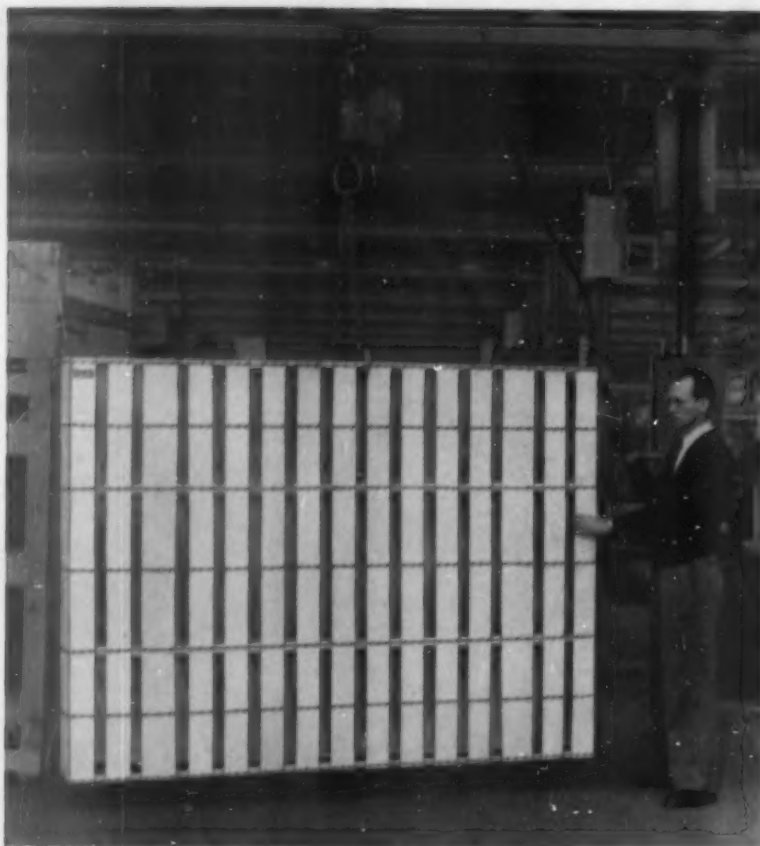
Newest Cab-Over-Engine design, either tilt-type or the revolutionary new raise-type Verti-Lift Cab, the ultimate in basic "cab-over" design.

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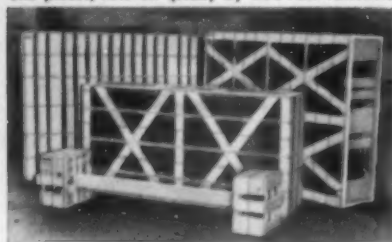
One of four General Wirebounds, this one, containing two 100-pound glazed door wings, is ready for shipment from the Evansville, Indiana, plant of International Steel, largest revolving door maker.



Here are curved enclosure walls. End pieces bolt on, prevent shifting in transit.



Wirebound mat is laid out on floor, wrapped around end pieces, secured quickly by wire rock fasteners.



Four crates total 1,044 pounds—396 pounds less than before, take only half the time to pack.

Revolving door costs turned sharply down by General-Engineered Wirebounds

Shipping a revolving door means packing heavy, costly precision parts—a round ceiling piece, curved enclosing wall, glazed door wings, and an eight-foot shaft with large bearings at each end.

International Steel Co., Evansville, Indiana—the leading manufacturer of revolving doors—ships many per year, is keenly cost conscious. General Box engineers, working with International's Manager of Shipping, recently came up with wirebounds that cut shipping weight by 396 pounds and cut packing time in half, compared with the custom-built nailed crates formerly used.

Total savings from use of the new containers are expected to amount to at least \$10,000 a year. As

International's management is well aware, it would take a lot of sales to boost profits that much.

General has the testing facilities and the experience to help your company make this kind of progress, too. And it costs nothing to find out what the possibilities are. Just let us know where you are and what you ship. We'll send a man. And ask for your free copy of illustrated booklet, "The General Box."

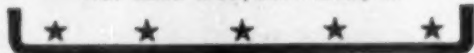
Factories: Cincinnati; Denville, N. J.; East St. Louis; Detroit; Kansas City; Louisville; Milwaukee; Sheboygan; Winchendon, Mass.; General Box Company of Mississippi, Meridian, Miss.; Continental Box Company, Inc., Houston.

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"We are now doing what we normally would be doing in May or June of next year."

same objective as they—backing Eisenhower—regards him highly. This makes him a natural liaison between Congress and the White House.

II. The Buildup

The man described by Rep. Eugene Keogh of Brooklyn, N. Y., as the "nearest thing to a Jim Farley that the Republican Party has produced," comes by his political bent naturally. Born in 1900, the youngest of eight children, Hall grew up in the shadow of Theodore Roosevelt at Oyster Bay, where he played with the Roosevelt children.

When he finished high school at 16, he decided to launch out on his own. He landed in Washington as an assistant bookkeeper for the Potomac Electric Power Co. at \$50 a month—out of which he paid room, board, and tuition at night law school at Georgetown University. "I invented the idea of wearing pants and coat that didn't match," he says, recalling those lean years. At 19, when he had his law degree, he was promoted to bookkeeper at \$200 a month. He then had to decide whether to hang onto this lush job or practice the profession for which he had prepared himself. He chose the law, and went to work for the New York firm of Henry A. Wise, at \$15 a week.

• **Into Politics**—During his 10-year tenure there, he lived in Oyster Bay, where the political bug hit him. He joined everything he could get into, with the exception of the Ku Klux Klan. As a precinct committeeman, he wore out lots of shoe leather and, in 1927, when a vacancy came up for the Nassau

County seat in the New York Assembly, Hall was tapped. Two years later, he ran for sheriff, but after a three-year term he stepped out. "It was the only job in politics where I was glad when it ended," he says.

By 1934, he was back in the State Legislature in Albany, where he displayed the stubborn streak that occasionally crops out by leading a revolt against Irving Lves, who was seeking reelection as speaker. Hall was miffed over what he considered a broken promise, and held up organization for 10 days—finally forcing Lves to step down.

In 1938, when Hall was running for reelection, Rep. Bob Bacon died, and a party caucus chose Hall to run for Congress. But there was a problem: Since Bacon was dead, his name could be removed from the ballot, but an alive Hall had to stay on. So on Election Day, Hall was listed twice: for Congress and for Assembly. "I had the job of conducting a write-in campaign against Hall for Assembly," he recalls. "By good organization work I was badly defeated."

III. Washington Bound

In Washington, Hall quickly made himself a reputation as an effective cloakroom operator, and became adept at buttonholing members and lining up support for a course of action. His knowledge of organization politics impressed GOP leader Joe Martin and other Republicans, and they recognized this in 1947 by making him chairman of the Congressional Campaign Com-

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"I invented the idea of wearing pants and coat that didn't match."

mittee. In 1948, National Chmn. Guy Gabrielson tried to assimilate the activities of the Congressional Committee into the National Committee, but Hall went to the mat with him over it, and rallied enough Congressional Republicans to fend off Gabrielson's effort.

• **Finger in the Pie**—While in Congress, Hall kept his finger in New York politics. During his years as a precinct committeeman, he was active in pushing Thomas Dewey's Presidential candidacy, and he worked closely with J. Russell Sprague, Nassau County boss. Hall and Sprague came up together in county politics, and Sprague's uncle, Wilbur Dowdy, had been county boss before him. Sprague was close to Dewey, and a member of the triumvirate that mapped strategy in Dewey's unsuccessful bids for the Presidency.

In 1950, Hall and Sprague split over Long Island labor czar William Dekoning, Sr., when Dekoning demanded that Hall vote against the Taft-Hartley Act. Hall refused, and from that point, Dekoning was out to defeat him. Dekoning was boss of employment at Roosevelt Raceway, which later figured in a racetrack scandal that led to Sprague's resignation as National Chairman and Dekoning's conviction on a charge of extortion.

Hall made Dekoning the issue in the fall campaign, and won. While Sprague supported Hall, the rift was never really closed.

• **Historic Dinner**—Some observers feel that this friction was what decided Hall to run for Nassau Surrogate in 1952, rather than to offer for Congress again. Hall won his judgeship without making a speech or shaking a hand—he had been too busy running the Congressional Campaign Committee and working on the Eisenhower campaign train. After his election, Hall's Nassau friends decided to give him a

puzzled

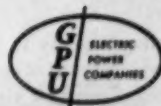
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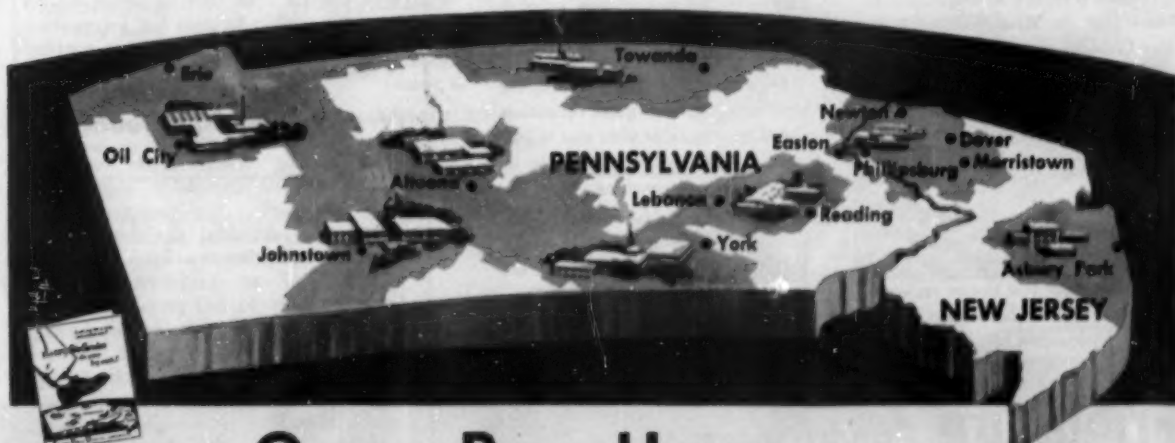
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"If I had joined the Klan . . . Whew! How it could be used against me now!"

testimonial dinner. So many tickets were sold that the affair had to be shifted to the gymnasium at King's Point Merchant Marine Academy to accommodate the 1,600 who showed up—including House Speaker Joe Martin.

On the way to the dinner, it occurred to Martin that Hall was the best bet to succeed Wes Roberts, who had resigned as chairman after revelations of his operations as a Ten Percenter. "I know Hall will make a fine judge," Martin said at the dinner, "but we need him back in Washington. Maybe he will be coming back as National Chairman."

The trial balloon caught on—over Sprague's opposition. Martin returned to Washington and began selling Hall.

Many friends told Hall he was crazy to quit a \$30,000-job with plush pension benefits for a thankless job that paid nothing. Others consoled him with the thought that he never would have been able to gear his locomotive nature to the horse-and-buggy routine of the judgeship.

IV. Coaching the Team

In talking about Hall, you get around to the inevitable comparison with Jim Farley, the accepted prototype for a successful chairman. Both are big, bald, have a keen sense of humor, and an excellent memory. Farley's ability to call people by name is legendary. Hall, too, is no slouch. He can glance over a report and six weeks later quote you sections of it.

One of the big differences in the two men is that Hall is much more a one-of-the-boys type, likes to pal around with politicians, while Farley is more aloof. Hall has a reputation for song parodies, and many of them have been

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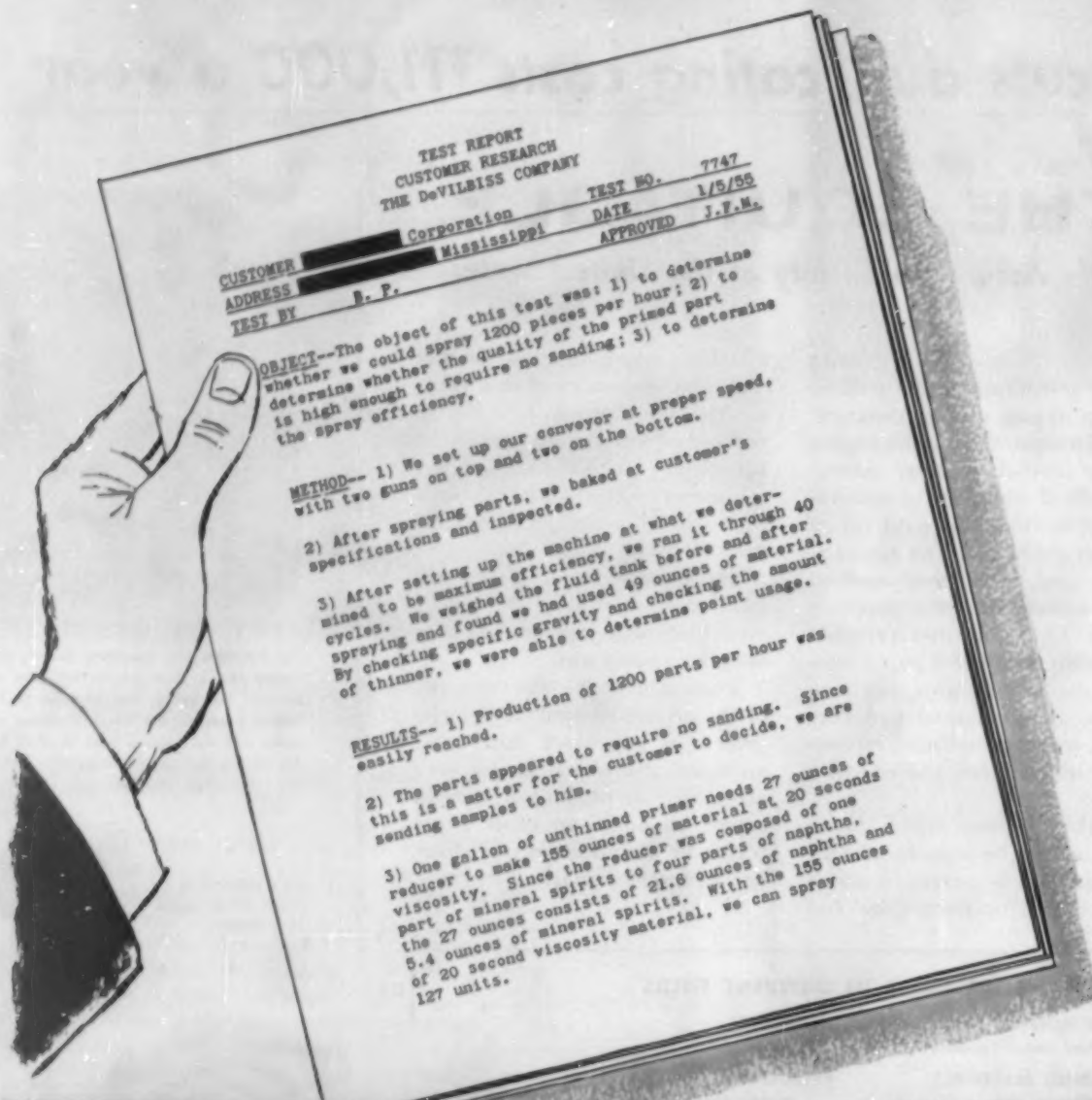
THE HALOID COMPANY

55-102X HALOID ST., ROCHESTER 3, N. Y. • Branch Offices in Principal U. S. Cities and Toronto



The fastest, cheapest, most versatile way to make masters for duplicating

Know in advance the benefits



Coating speeds from 3,000 to 14,000 square feet per hour are possible with DeVilbiss Automatic Horizontal Transverse Machines. Here, a test production run is being made on metal panels in modern DeVilbiss Research Laboratory.



Vacuum-cleaner housings like these are typical of parts that can be finished automatically on DeVilbiss Chain-On-Edge Machines. From 500 to 4,500 pieces per hour can be coated, depending upon article size and job conditions.

of painting your product AUTOMATICALLY

Would you like to switch to automation? A test production run in the DeVilbiss research laboratory can answer two big questions for you: (1) Is it practical for you to paint your products with fully automatic equipment? (2) How much will it cost?

For every manufacturer, the changeover from manual or semi-automatic painting to fully automatic painting is a major step.

And usually there's only one way to be sure if it's the right step: by an actual test run on already-installed equipment. For only then, ordinarily, is it possible to tell if automatic painting is practical — or even possible — on a production basis.

That's why many manufacturers are having us schedule trial production runs in our fully equipped research laboratory. For we can determine *in advance* whether or not painting your product automatically is practical or economical. Here's what we do:

Using your unpainted product, or a component part — together with your painting or coating specifications — we run a test on the standard automatic machine best suited to your product. This test duplicates, in every possible way, the actual conditions in your shop. When completed, the results of the test run are passed along to you.

Thus, you know ahead of time — before making any equipment purchases or shop

modifications — if it will pay you to paint automatically. You know the most economical production rate, the amount of paint or other coating necessary to do the job properly, the exact type of machine best suited to do the job.

We'd be happy to work with you on such a test. Write us, in detail, describing your product or component, type or kind of coating applied, number of coats, and production rate desired. Address your letter to: The DeVilbiss Company, Dept. 318A, Toledo 1, Ohio.

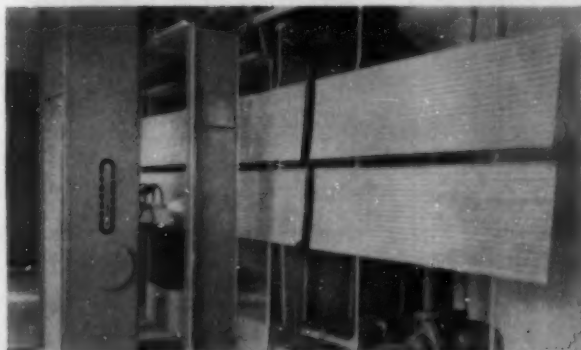
THE DEVILBISS COMPANY Toledo 1, Ohio

Santa Clara, Calif. • Barrie, Ontario
London, England

Offices in Principal Cities

FOR BETTER SERVICE, BUY

DEVILBISS



Parts traveling on overhead conveyors, such as these corrugated panels, can be quickly coated, front and back, on DeVilbiss Automatic Vertical Transverse Machines. These machines can even be adapted to paint boxcars automatically.



DeVilbiss Automatic Rotary Machines spray a great variety of products economically and quickly, with absolute uniformity — at production rates from 650 to 5,000 pieces per hour. The operator need only load and unload the table conveyor.

Introducing World's First Home Water Cooler



Westinghouse *Cooleret*

Now, you can enjoy the convenience of a water cooler at home! Plenty of cool, cool water—just right for drinking—always at your finger tips. No more bulky bottles and pitchers to clutter the refrigerator.

Stainless steel cooling chamber holds full gallon of cool water. Or you may use 2, 3 or 5-gallon sizes of bottled water.

Gleaming white enamel finish... easy to clean and keep clean. Just counter height... only 3 feet high... 1 foot square. No installation, pipes, drains. Just plug it in. See the Cooleret at your Westinghouse dealer's now!



Ideal for the office, too! Space-saving, low-cost Cooleret is also available in business-like gray enamel finish.

FREE BOOKLET! Complete information on the home water cooler. Write: Westinghouse Electric Corp., Electric Appliance Div., Springfield 2, Mass.

YOU CAN BE SURE... IF IT'S

Westinghouse



"I had the job of conducting a write-in campaign against myself for Assembly."

sung at GOP conventions and rallies. He's also an expert at card tricks, and if he sees a new one, will work stubbornly all night to master it.

This stubborn streak shows up again in his attitude toward Old Guarders who accuse Eisenhower of being a New Dealer. "We have got to get rid of the labels of 'Depression Party' and 'Against Party' tacked on us during the out years," he says. "We have to build an affirmative, majority-minded party."

He realizes that can't be done in a few months, but figures that he has six years of grace—provided Eisenhower will run again.

• **Realistic**—Hall has no illusions about the party's limitations. "We've been up to the city limits of the big cities for years. We have the farms and the suburbs, but we can't crack the cities."

He feels that the future of the party lies southward, but it will take top candidates and untiring organization work to make any real headway in the South. That's where he thinks candidates like Eisenhower can give the southern expansion drive a real impetus. Like his perseverance with card tricks, Hall hopes by plugging away to come up with the solution.

"We'll take on the image of Eisenhower while he's President," Hall explains his interim tactics. That should provide time to rid the party of its minority psychosis, recruit good players, and put together a winning team.

When you talk with Hall, you get the idea that he isn't going to be attracted by \$30,000 jobs until he has that winning team. Hall is irretrievably wedded to politics—a fact that his wife good-naturedly accepts. For Hall, politics has the same siren call that the clang of the fire alarm has for an old fire horse.

Hand her a letter,
a news clipping,
any office record...



She'll make 3 photo-exact copies in 1 minute

Thousands of companies are speeding routines now with the *completely different* Kodak Verifax Copier. It costs only \$240 . . . and it makes 3 copies of any record for less than 4¢ each.

What it saves in 1 month often exceeds its cost. Let's consider the savings for you and your secretary alone.



☐ You'll seldom have to dictate a letter which, for the most part, quotes one you have received. A brief note plus a Verifax copy of the original letter is all you need. You'll be able to jot your answers on many letters—send Verifax copies back; customers will welcome the speedy reply . . . won't have to go to their files for carbons of their letters.

☐ Ends slow "one-copy" routing. Your key men simultaneously can read Verifax copies of incoming reports, news clippings, etc. . . give you their comments, pronto.

☐ Helps lots at meetings. Next time someone says, "You probably can't see this at the other end of the table" or "I'll pass this around"—buzz your secretary. In a minute or two, you'll have enough Verifax copies so everyone can see—and think—at once.

☐ Ends inconveniences . . . like waiting for extra carbons to be typed . . . or for your "only copy" to be returned.

☐ Protects your records—you won't have to send them out of the office to be copied; no one else need see them.

☐ Your secretary will save a half-hour or more of retyping in copying just one report. *She'll make 3 Verifax copies in 1 minute for less than 4¢ each.* No fuss. No change in present room lighting.

☐ She won't have to proofread with a second girl.

☐ Her work will be error-free. Verifax copies are photo-accurate, authentic from letterhead to signature.

☐ She'll double your savings on dictation—won't have to take notes and then transcribe.

In short, the savings on your job and hers in one month should exceed the \$240 cost of a Kodak Verifax Copier. And we haven't even considered the other office personnel who'll realize comparable savings.

By all means, take a few minutes soon to see a free demonstration of Verifax copying in your office. Learn all the important ways in which thousands of companies are now saving.

KODAK VERIFAX COPIER only \$240

EASTMAN KODAK COMPANY, Business Photo Methods Division, Rochester 4, N. Y.

Gentlemen: Please send more information about Verifax copying and names of near-by Verifax dealers.

Name _____ Position _____
Company _____ Street _____
City _____ State _____

MAIL COUPON FOR FREE FOLDER

21



Kodak

St. Louis' Hour of Decision

ST. LOUIS —The nationwide push for urban renewal comes to a decisive test here next week.

After one of the most intensive campaigns ever seen in the area, voters will go to the polls on May 26 and say "yes" or "no" to the biggest bond issue in the city's history—\$110.6-million. If they approve it—or at least the major part of it—St. Louis will be on the way to giving itself the sort of facelift that Pittsburgh, Philadelphia, and other cities have started.

At this point, there is no organized opposition to the bond issue. But its backers are running scared just the same.

The ballot that voters will get on Thursday—one of the longest ever printed here—has, all told, 23 separate propositions. Each has to get a two-thirds majority to carry. The complete package would pour some \$43-million into the street and highway system, including the city's share of the cost of three new expressways; \$36-million into slum clearance, neighborhood rehabilitation, parks, playgrounds, and community centers; \$18.8-million into new city buildings; the remainder into new equipment and fixups for old buildings.

• **Downtown**—What the planners hope to get out of this, among other things, is a reprieve for downtown—a long-overdue means of rescuing it from the clutch of traffic jams, spreading slums, and neighborhood decay, all of which have helped speed the shift to the suburbs. From the start, the driving force behind the program has been a group of 20 business and civic leaders who are banded together in a nonprofit corporation called Civic Progress, Inc. Mayor Raymond R. Tucker has called Civic Progress the sparkplug "for every major civic improvement" since its organization five years ago.

In the campaign that has built up for the bond issue, practically every group that counts has gone down the line for it. Both political parties are backing it; the newspapers are solidly for it; radio and television, and their advertisers, have turned over time to plug it; space on more than 200 billboards has been donated, 700,000 pamphlets have been handed out, and a movie trailer has been circulating around 70 theaters in the city. But despite all this, no one seems ready

yet to say the program is in the bag.

• **A Piling Up**—Although the bond issue will cost the average property owner only about \$2 more per year, \$110-million is a lot of money to conservative St. Louis, where the last big bond issue was in 1944. On top of \$110-million, though, the voters are being asked to approve a new \$16.4-million school bond issue. And all this has to be swallowed along with a new \$75-million state bond issue and the fact that the legislature has just voted to double the state's income tax. For St. Louis, which up to now has kept a tight grip of its redevelopment pocket-book, it may be too much to take.

• **OMAHA** —A turnpike to "nowhere" may be the outcome of what Iowa and Nebraska did on toll roads.

Iowa has just set up a Toll Road Authority with the idea of building a \$180-million east-west pike from north of Davenport to Council Bluffs at the Nebraska border. But the same week, Nebraska killed off its authority, following a long fight against it by farm groups, gasoline dealers, and motel owners. Nebraska had created the turnpike body in 1953, and one of its proposals was an east-west road from the Iowa border to North Platte.

Under the new law, Iowa's toll road authority can't go ahead on any pike until a neighboring state "has negotiated the sale of revenue bonds to construct a toll road which shall extend to the boundary of Iowa." But Illinois is considering such a road, and Iowa might build to the Nebraska border—even though there's no hope now for a western toll linkup.

• **PITTSBURGH** — The Army and the Navy have joined hands here in paying \$20-million to fix up a plant they hope never to use.

The plant, which has been converted to shell production, is the Naval Industrial Reserve Ordnance works at Hays, near Pittsburgh. It will stand by to operate if more shells and small

projectiles should be needed. In the meantime, it will be put in mothballs.

The Army says it's the first time an ordnance plant has been fully equipped by the government and put into standby reserve—before going into production.

• **MINNEAPOLIS** —It has been a rough week for the industrial side of Minnesota's economy.

In St. Paul, Simon & Mogilner, national manufacturer of children's and infants' wear, said that it probably would follow other textile-apparel companies out of the state and switch south. In Duluth, McGraw Electric Co. announced that it was abandoning plans to operate the two Coolerator Co. plants it took an option on last winter. McGraw bought Coolerator's inventory of refrigerators and freezers and got its option in a deal with International Telephone & Telegraph Corp. in December.

Both companies struck at Minnesota taxes as big reasons for their moves. But Mogilner's Samuel E. Mogilner was especially bitter. "If anything is responsible for driving industry out of the state," he said, "it is the short-sighted view of the farmers who control the legislature."

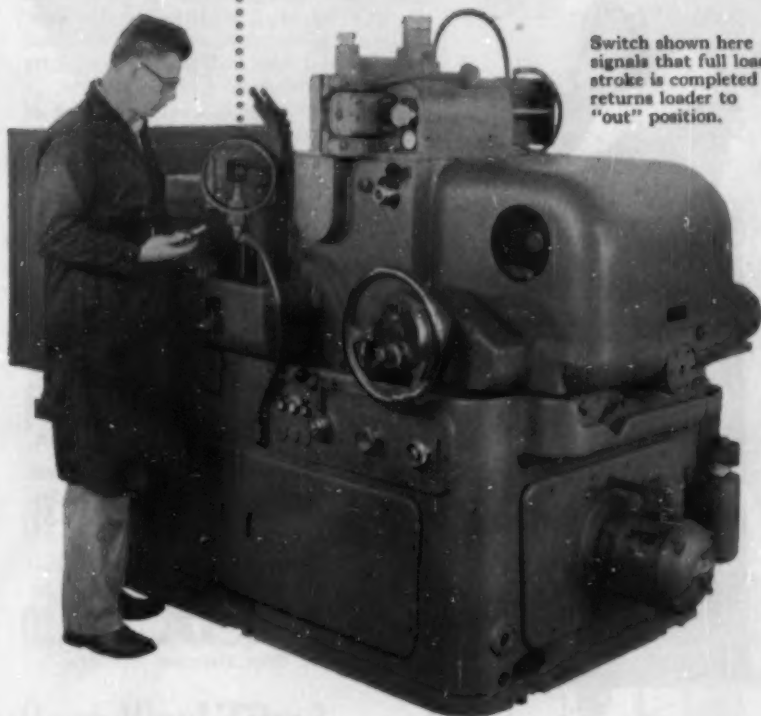
• **BOSTON** —The nation's 12th—and New England's first—educational TV station is now on the air in the Boston area.

Built at a cost of \$600,000, WGBH-TV is ivy-wrapped in practically every respect. It is operated under the wing of the Lowell Institute Cooperative Council, whose membership includes seven local colleges and universities, the Boston Symphony Orchestra, the New England Conservatory of Music, and the Museum of Fine Arts. Its 5:30 p.m. to 9:00 p.m. programming Monday through Friday comes from a studio opposite the main entrance of the Massachusetts Institute of Technology in Cambridge.

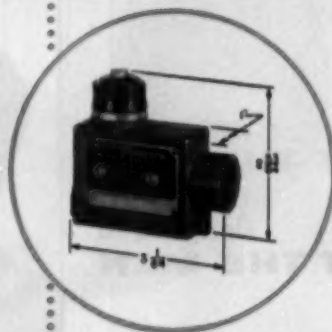
Estimates are now that WGBH-TV will cost about \$300,000 a year to operate. The cooperative council and companies and communities in eastern

MICRO SWITCH Precision Switches A PRINCIPLE OF GOOD DESIGN

3 SWITCHES help this Landis Grinder precision grind 380 piston assemblies an hour



Switch shown here signals that full load stroke is completed and returns loader to "out" position.



This switch signals that the loader has withdrawn and starts grinding wheel head into position.

MICRO SWITCH products were selected by engineers of the Landis Tool Company to perform important automatic functions of this No. 12 Centerless Grinding Machine.

The switches signal and control the various steps of the loading and unloading cycle. Landis engineers selected the dependable MICRO SWITCH precision units for this rugged day-in, day-out service because:

- 1 MICRO SWITCH provides widest selection of oil-tight switches of this type.
- 2 MICRO SWITCH national distribution makes easy switch replacement possible.
- 3 MICRO SWITCH field engineering service is quickly available.

For almost two decades, manufacturers of high quality machinery, electronic devices and instruments have found MICRO SWITCH engineering assistance the quick, practical and economical answer to switching problems. "MICRO SWITCH, Freeport, Illinois" is the sterling mark of quality on precision switches. Call your nearest MICRO SWITCH branch for consultation and advice without obligation.

Switch signals that finished part has been ejected and starts loader on "load" stroke.



A complete line of snap-action and mercury switches

MICRO SWITCH provides a complete line of extremely reliable, small-size, high-capacity, snap-action precision switches and mercury switches. Available in a wide variety of sizes, shapes, weights, actuators and electrical characteristics. For all types of electrical controls.

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A DIVISION OF MINNEAPOLIS-HONEYWELL REGULATOR COMPANY

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Arnot

OFFICE-ettes^{††}

Designed to
FIT THE JOB

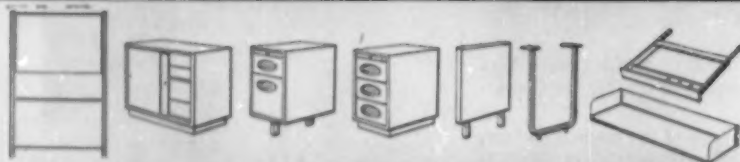
Designed to
FIT THE MAN



Because Arnot-Jamestown's range of in-stock modules is the most extensive in the industry, one desk, one work station or a whole combination can be specifically planned to fit the space requirements, the job and the personnel in your office.

With these Arnot interchangeable components in steel or wood, an almost unlimited number of arrangements tailored to fit your office requirements is possible. And, free-standing Arnot PARTITION-ettes^{††} can be integrated with the desk units to form private offices or departmental sections.

Your Arnot-Jamestown dealer will be glad to demonstrate this new concept of modular office planning. Write for name of dealer nearest you.



FREE
—an unusual, colorful
brochure showing
installations and indexing
the components of the
Arnot modular system.
It is yours for the asking.

Write:

A new way of life in the office with
Arnot
PARTITION-ettes^{††} and OFFICE-ettes[†]



AETNA STEEL PRODUCTS CORPORATION

The Arnot® Office Desk
Product was built here

ARNOT-JAMESTOWN DIVISION
JAMESTOWN, NEW YORK

Massachusetts are expected to foot the bill.

LOS ANGELES—California's Supreme Court is standing pat on its decision that the city of Long Beach has a right to only half the money in its tidelands oil kitty (BW—Apr.23'55,p68).

Last week it turned down the city's bid for a rehearing on the case, thus left the door open for the state to take at least half the unspent kitty and half the revenues from now on.

Meanwhile, a bill has come out of committee in the state's Assembly that would turn over the entire jackpot to California. Long Beach has said it probably will appeal the case to the U.S. Supreme Court.

DALLAS—Shorts for the milkman — Bermuda variety — have become optional uniform for Metzger Dairies' deliverymen.

About 30 of them bared their knees last week, reported that the new costume brought housewives to the door whom they hadn't seen in months.

Typical comment from the ladies—"My, how exquisite"—was matched by a not-so-typical comment from one of the deliverymen. He said he'd quit first, rather than abandon trousers.

DETROIT—A new all-in-one charity drive here may be a pattern-maker for other cities.

Detroit long ago pioneered in united giving through its Torch Drive and the Greater Detroit Hospital Fund. The present campaign, though, is different. Instead of raising money to meet the operating costs of health and welfare services, this one is out for capital funds. Its target is \$16.5-million to rehouse and re-equip 45 metropolitan-area agencies.

The drive is being run by the Metropolitan Detroit Building Fund, Inc., a nonprofit corporation. Set up in 1953 by a group of business leaders, the fund is looking to local business for its main contributions. Each company is being asked to give \$25 for each employee. So far, \$4.5-million has been collected with almost \$4-million of it coming from Ford Motor Co. and General Motors Corp.



Unsurpassed clarity and gloss

KRENE Cast Vinyl Film is crystal clear... preferred for many uses... for brilliant packaging... for any application where clarity must be combined with strength.



Resistance to cracking means long life

Storage bags keep their flexibility, and strength. Seams are strong, and easily stitched without fear of pulling away and ripping.



Easily heat-sealed

Seams may be heat-sealed by conventional means. This means quick convenience in retail packaging operations, plus assured dust-free and soil-free protection.



High chemical resistance

KRENE Cast Vinyl Film and Sheeting resist most acids, alkalies, alcohol, oils and greases. Drum liners protect metal drums from corrosion and contamination of contents, make loading and unloading easy, and speed drum returns. Fine for one-shot drums, too.

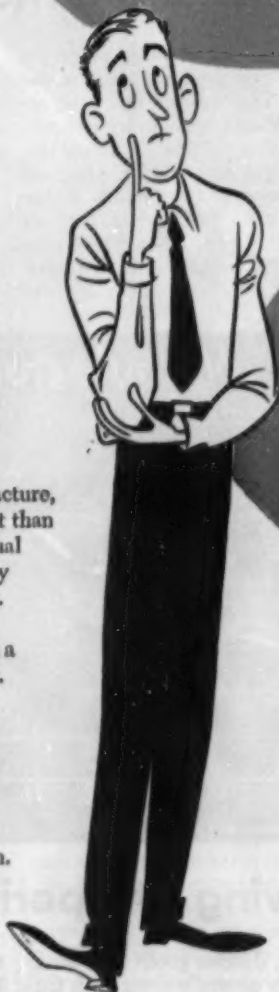


Laminating offers possibilities

Laminating KRENE Cast Vinyl Film to metal foil adds toughness and heat-sealability. As an inside liner it reinforces the foil and protects the metal against corrosive contents.

Are you taking full advantage of the benefits of *Krene* Cast Vinyl Film?

Because of the special method of manufacture, KRENE Brand Cast Vinyl Film is different than other films you may have used. Its unusual strength combined with remarkable clarity and gloss is unique among flexible films. In addition, chemical resistance, ease of fabrication, and other properties give you a highly versatile material for scores of uses. Increases in production have resulted in appreciable savings in cost. And its high strength and resistance to puncture and tearing offer great advantages in many applications. Why not investigate today. It's available in thicknesses from .001 to .012 in either 36 or 48 inch width. For samples of KRENE Cast Vinyl Film, and an informative booklet, write Dept. HQ-14.



**INVESTIGATE
BAKELITE®**

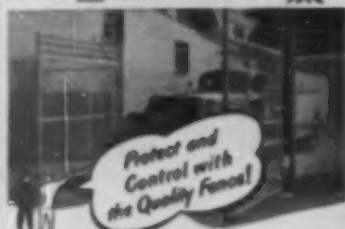
Krene
Cast Vinyl Film & Sheeting

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As a defense against loss or damage hazards and as protection against unauthorized entry, provide Page Fence security. Whether you choose heavily galvanized Copper-Bearing Steel, corrosion-resisting Aluminum, or long-lasting Stainless Steel, PAGE Fence is quality controlled from raw metal to rugged fence erected on metal posts deep-set in concrete. Available are 8 basic styles, varied by heights, types of gates, top rails, and barbed wire strands for added security. Finally, your PAGE Fence will be expertly erected by a reliable, technically trained firm. For important fence data and name of nearest PAGE firm, write PAGE FENCE ASSOCIATION • Monroeville, Pa.

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EASIER
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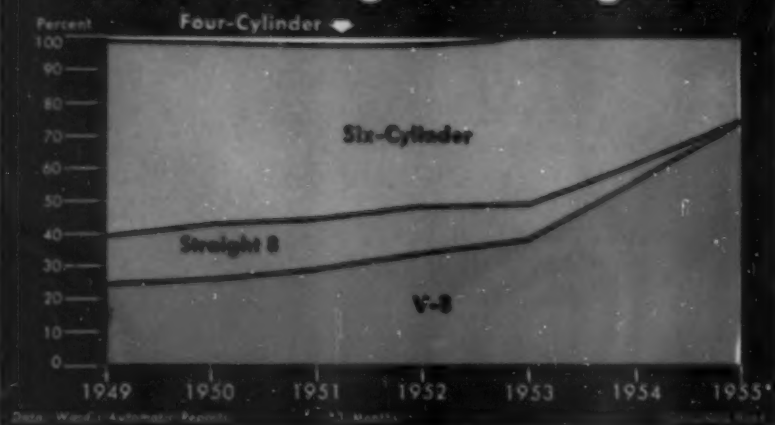
Why waste time (that's money!) looking for papers that should be at your fingertips? And can be!—if you use ACCO Bind Folders or ACCO Press Binders for filing your correspondence, invoices, reports and other papers. You'll get more done, easier, better, cheaper and have a real "file and find" system with Accobinding. Ask your stationer.



ACCO PRODUCTS, INC.
ODDENSEBURG, N. Y.
In Canada: Acco Canadian Co., Ltd., Toronto

CHARTS OF THE WEEK

U. S. Passenger Car Engines



V-8s Seize the Market

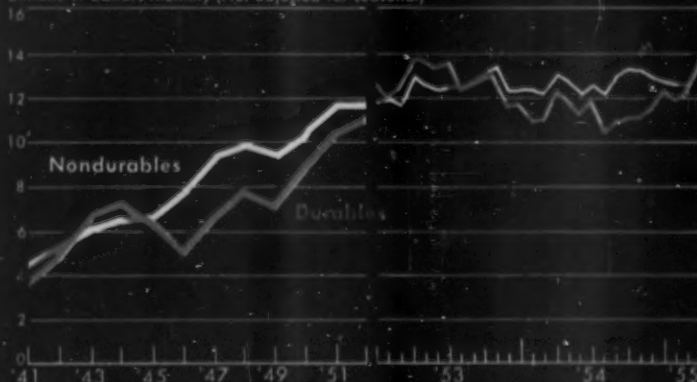
V-8 engines are the power plants for three out of every four cars made in the U.S. in the first quarter this year, according to Ward's Automotive Reports. Ward's forecast is that 80% of this year's passenger cars will be equipped with V-8 engines. One result of the demand for V-8s: Not one car that has come from U.S. production lines so far this year has been fitted with a straight-eight engine. Another result is that the

six-cylinder engine's share of the market has slipped from 50.6% in 1953, to 26.5% in 1955's first quarter.

The V-8's rise in popularity has been sudden. In 1950, it held only 26.3% of the market; and last year, it had only 56.3%. Both Chevrolet and Plymouth are expanding their plants to meet the demand for V-8's. But present capacity, Ward's Automotive Reports says, is still well short of demand.

Manufacturers' Sales

Billions of Dollars Monthly (Not adjusted for seasonal)



Following Prosperity's Pattern

In the past, durable goods sales have followed pretty generally along with the movement of the business cycle. In

today's prosperity they've risen sharply, too. But now there's the question of whether durables are carrying more than



RADAR GUNSIGHT HELPS TAC PILOTS BAG "FOE"

Korean-tested Device Proves Deadly Accurate in Stopping Jet "Invaders"

THE STORY BEHIND THE STORY:

Here at home, where air defenses are constantly being strengthened, there's a good chance of detecting and intercepting hostile planes before they reach their destination. And abroad, as you've probably noticed from headlines like the one above, chances are good that aggressors would be intercepted and shot down by fighters from our overseas bases or from NATO wings.

One reason for the impressive marksmanship demonstrated by Tactical Air Command pilots, of course, is their intensive training. Another is the accuracy of the computing gunsight first used in Korea and now serving TAC and NATO squadrons. Here's what it does, in the words of General "Jimmy" Doolittle:

"In jet combat you are chasing a small and elusive speck, and you have only seconds to shoot at it. You are travelling ten miles per minute, twisting and turning; your senses can't measure the speed

and range of the target or the angles involved in hitting it—and even if they could, you lack time for necessary calculations. The new gunsight does this for the pilot. He watches an illuminated circle and dot reflected on his windshield. When circle and dot are superimposed on the target, he fires."

Developed through the joint efforts of the Instrumentation Laboratory of M.I.T. under Director Dr. C. Stark Draper, Sperry, and U.S.A.F.'s Armament Laboratory—the radar gunsight is an example of teamwork at its best—providing better weapons for defense efficiently and economically.

SPERRY GYROSCOPE COMPANY

DIVISION OF THE SPERRY CORPORATION • GREAT NECK, N.Y.

can you too cut costs with **UPSON** **WOOD FIBER** pieces and cut-outs?

Hundreds of businesses are effecting huge savings right now with Upson Wood Fiber products. Often, inexpensive Upson Wood Fiber products can do a better job than more expensive materials. Below are three examples.



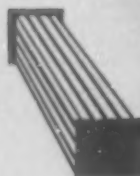
Card Table Tops

of all types
Upson Wood Fiber Products are available in many thicknesses. Chances are, there's one to meet your needs, and Upson's long experience in cutting to close tolerances in quantity offers big savings to you.

Backs, Dust Bottoms
Upson's specialized cutting equipment and ability to cut to exact size are perfect for the furniture industry. Upson Panels paint easily, are super strong! Contact Upson, discuss your problem.



Panel protectors for your product
Let inexpensive, super strong Upson Panels take the bumps, scratches, and marks. Your product arrives in top condition. Use in materials handling and save. Also available waterproofed.



Use Upson Panels for shipping pads, shipping dividers in crates or freight cars, filler pieces for metal novelties, paint sample boards, reel ends, toy blackboards, 1001 other uses. Let Upson, as a specialist, cut your costs!



**FREE SAMPLE KIT
MAIL COUPON NOW**

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PROVEN QUALITY YOU CAN TRUST

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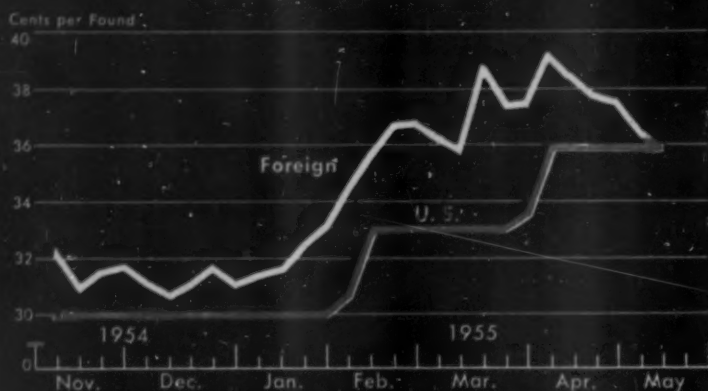
their share in the recovery.

Latest estimates place durable and nondurable sales at the same level—for the month of March each reached \$14-billion.

Only twice since 1940—in wartime 1943-44, and in the peak prosperity of

1952-53—has the dollar volume of durable goods sales exceeded sales of non-durables. We might be headed along this same way again. But each time that this has happened before, a period of readjustment has followed for durable goods manufacturers.

Copper Prices



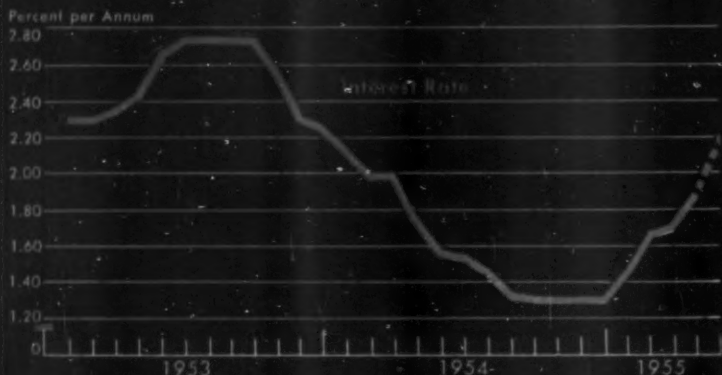
Heading Down

When foreign copper prices skyrocketed early this year, U.S. prices climbed after them. U.S. prices rose from 30¢ per lb., in January, to 36¢ per lb. by mid-April. Now there are

increasing signs that the acute copper shortage is easing. And foreign copper prices are on the way down again. At midweek they had come down to meet the U.S. price of 36¢ per lb.

Prime Commercial Paper

(Dealers Rate, 4-6 Months, New York City)



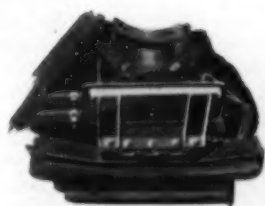
Short-Term Rate Is Jumping

Commercial paper dealers have increased their rates on short-term corporation notes four times in recent weeks (BW-Apr. 9 '55, p. 50). Today, the rate on these notes stands at its highest point in the last 17 months.

Reason for the rise is said to be the dealers' inability to sell the paper at previous lower rates. Demand for credit has been strong as a result of the business upturn and Federal Reserve policies have tended to tighten credit.

COOL GO

FOR BUICK'S DYNAFLOW!



Every Dynaflow transmission ever built has been equipped with a durable, dependable Harrison oil cooler.

Hot performer . . . but cool as they come! That's Buick's famous Dynaflow transmission! And it's kept cool—at perfect operating temperature—by Harrison! In fact, Harrison oil coolers control temperature on millions of the best-known, most-dependable automatic transmissions on the road today! Harrison heat control products are rugged and reliable . . . designed to save space, weight—money, too! And with our extensive research facilities, we're constantly searching for, and *finding*, better ways to build all kinds of automotive, aircraft, marine and industrial heat transfer equipment! If you have a hot or cold problem, look to Harrison for the answer!

HARRISON RADIATOR DIVISION, GENERAL MOTORS CORP., LOCKPORT, N. Y.

**TEMPERATURES
MADE
TO
ORDER**

HARRISON



SPATTERDASH OF INK COLOR
... ink drum lid photographed
in a Gair Folding Carton Plant.

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WHAT IT'S ABOUT



A Cold Eye on "Paternalism"

The first Hoover Commission on government reorganization—which disbanded in 1949—claims a record of better than two hits out of every three tries in getting its proposals adopted. The largest, and most successful part of its work was in chopping out waste and red tape.

The second Hoover Commission, with about half of its reports now in, has been trying to set things up for a new round of federal reform striking at "paternalistic" government. It has not yet seen the adoption of any of its recommendations. It's too early for that. But the group is also finding itself the target of angry charges from many sources—even from high administration levels and such groups as the American Legion.

The shower of brickbats doesn't mean that the new commission is doing its work less effectively or less efficiently than the old. It means only that in its nature and scope the second Hoover Commission is more controversial than the first.

Eventually, some of the second commission's recommendations, which have been flowing out in a steady stream since February, will be adopted. But only time will tell whether the commission and its 80-year old chairman, former Pres. Herbert Hoover, will get their way about bedrock changes in governmental patterns.

• **Barbs**—The anger directed at the commission has come from powerful groups and persons both in and out of government:

• **Navy Secy.** Charles S. Thomas, a Republican, accused it of trying to destroy the Administration. Defense Secy. Charles E. Wilson was less bitter in his objections.

• **The American Legion and Veterans of Foreign Wars** took violent exception to recommendations for narrowing GI rights.

• **The National Rural Electric Cooperative Assn.**—a public power group—saw an attempt to "asphyxiate" the Rural Electrification Administration.

• **A House Democratic leader** charges the Hoover group with giving business all the "breaks," and wanting to "turn back the clock to 1928."

The commission, taking no official note of the barbs, goes about its work of (1) exposing waste and inefficiency, and (2) telling where it thinks big government should be taken down a notch or two. It's the second part that's more controversial.

• **Scope**—By order of Congress, the commission's critical explorations in the government jungle are confined to the executive branch—like its predecessor, its official name is Commission on Organization of the Executive Branch of the Government.

Up to a point the commission's

work is like that of the first Hoover Commission, which served under Pres. Truman in the late 1940s. One example is its criticism of the Navy for stocking a 128-year hoard of gear parts and a 60-year supply of canned hamburger. This last was the point that drew from Pres. Eisenhower last week the comment that the Navy could really eat up the hamburger in five days if it was fed out to all the messes.

The present commission goes deeper, though. You see that clearly in this week's report on government's "business enterprises," which found the Defense Dept. competing "actively and unfairly" with private enterprise through some 2,500 business facilities representing an investment of \$15-billion. The commission said at least 1,000 could be eliminated without harming national defense or any essential government function.

The same report hit at some longstanding government activities. It called for gradual liquidation of the postal savings system, reappraisal of Navy shipyards, closing of many military commissary stores.

You see the commission's aim, too, in its lending report, which found the government in extensive competition with private banking by lending money through 104 agencies. You see it in the commission's objections to letting federal regulatory agencies act as prosecutor, judge and jury, and to having private business spend an estimated \$1-billion a year filling out federal forms.

• **Support**—When the commission is done, the chore of rallying public support will fall largely on the Citizens Committee for the Hoover Report. Its chairman is Clarence Francis, retired General Foods executive and an "elder statesman" of U.S. business.

I. Ideas and Men

You get a clear idea of the main guiding principle of the present Hoover Commission from its report on government lending agencies:

"In our consideration of these agencies, we have proceeded on the assumption that lending or guaranteeing loans is a function which the government should undertake only when private enterprise cannot or will not perform the function, and then only in furtherance of a justifiable government purpose."

This passage crystallizes the basic Hoover concept of less government and less federal competition with private business. It also illustrates the com-

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mission's acceptance of responsibility for determining what is a "justifiable government purpose."

Hoover, on the crest of a successful new career as chief architect of federal reform, willingly took his second commission into this arbiter's role. A commission consultant says, "It was pretty much Mr. Hoover's own idea."

• **Authority**—He had authority for it in the law, however. The acts setting up both Hoover Commissions were written by Rep. Clarence J. Brown (R-Ohio). There was one big difference. The 1953 act told the second Hoover Commission to recommend methods and procedures for "eliminating nonessential services, functions, and activities which are competitive with private enterprise."

The Eisenhower Administration did not take enthusiastically to the idea. Rep. Brown says, "Ike didn't understand at first, but I explained it to him and he went along willingly after that." One fear was that the commission would be mistaken as an arm of the Administration. Actually, it is beholden only to Congress, and then only for operating funds.

• **Who's Who**—The President appointed to the commission Chmn. Hoover; Atty.-Gen. Herbert Brownell, Jr., and Defense Mobilizer Arthur S. Flemming, both Republicans; and former Postmaster Gen. James A. Farley, Democrat.

Vice-Pres. Nixon named Sen. Homer Ferguson (R-Mich.)—later replaced by Sen. Styles Bridges (R-N. H.); Sen. John L. McClellan (D-Ark.); Dean Solomon C. Hollister of Cornell Engineering College (Rep.); and Dean Robert G. Storey of Southern Methodist Law School (Dem.). House Speaker Martin's appointees are Rep. Brown, Rep. Chet Holifield (D-Cal.), Sidney A. Mitchell, executive director for the first commission (Rep.); and former Ambassador Joseph P. Kennedy (Dem.).

By and large, the commission is conservative. But a staff member says, "The liberal viewpoint comes out more frequently than you'd imagine." And though Hoover, as active, working chairman, is key man, those close to it say it's "no one-man show."

II. The Task Force Way

Like its predecessor, the second Hoover Commission relies heavily on task forces to marshal facts and figures, and propose remedies. These are working groups from outside government. Hoover used his immense personal prestige to assemble a blue ribbon roster of more than 200, including some of the nation's top financial and legal experts, business executives, educators, physicians, and engineers.

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Times executive who came out of retirement to be the commission's editorial director, says the criterion was "experience brought to the table." He cites Sears, Roebuck's Gen. Robert E. Wood, heading the task force on use and disposal of surplus property, selected as the "best man in the country on cataloguing, storing, and selling of merchandise."

Other task force chairmen:

- Charles R. Hook, Armco Steel Corp. chairman, on business organization of the Defense Dept.; another steelman, Adm. Ben Moreell of Jones & Laughlin, heading the biggest (27-member) task force, on water resources and power.

- Paul Grady, partner in the accounting firm of Price Waterhouse & Co.—the force on lending agencies.

- Dr. Theodore G. Klumpp, president of the New York pharmaceutical firm of Winthrop-Stearns, Inc.—the force on medical services.

- **Different**—Task force reports and commission reports are two different things, both in name and fact—though there's a tendency to confuse them. The American Legion at first mistakenly attacked the commission as urging the closing of 19 veterans' hospitals, when this was actually a task force proposal.

MacNeil says, "Not a single task force report has been accepted by the commission without change."

- **Dissents**—The commissioners themselves frequently disagree. Holifield dissents on eliminating any New Deal-Fair Deal social programs. Brownell and Flemming, the Administration "watchdogs," dissent on proposals counter to known White House policy—such as to abolish the Export-Import Bank, or to set up a single operating transport directorate in the Defense Dept. They can't bind the Administration affirmatively, though.

III. Critics and Friends

The commission's schedule calls for some 18 reports in all. So far it has ranged all the way from proposals for cutting down paper work (BW—Feb. 26'55,p121) and setting up a Senior Civil Service (BW—Mar.5'55,p96) to proposing the creation of a federal advisory council of health.

- **Medical Debate**—The commission's critics direct their sallies not only at proposals but also at procedure. The medical services report got it both ways. The American Legion branded as a "step toward socialized medicine" the proposal for a voluntary, contributory insurance plan for dependents of military personnel, instead of giving them free medical and hospital care. This drew from the Citizens Committee the dead-pan comment that "the Hoover

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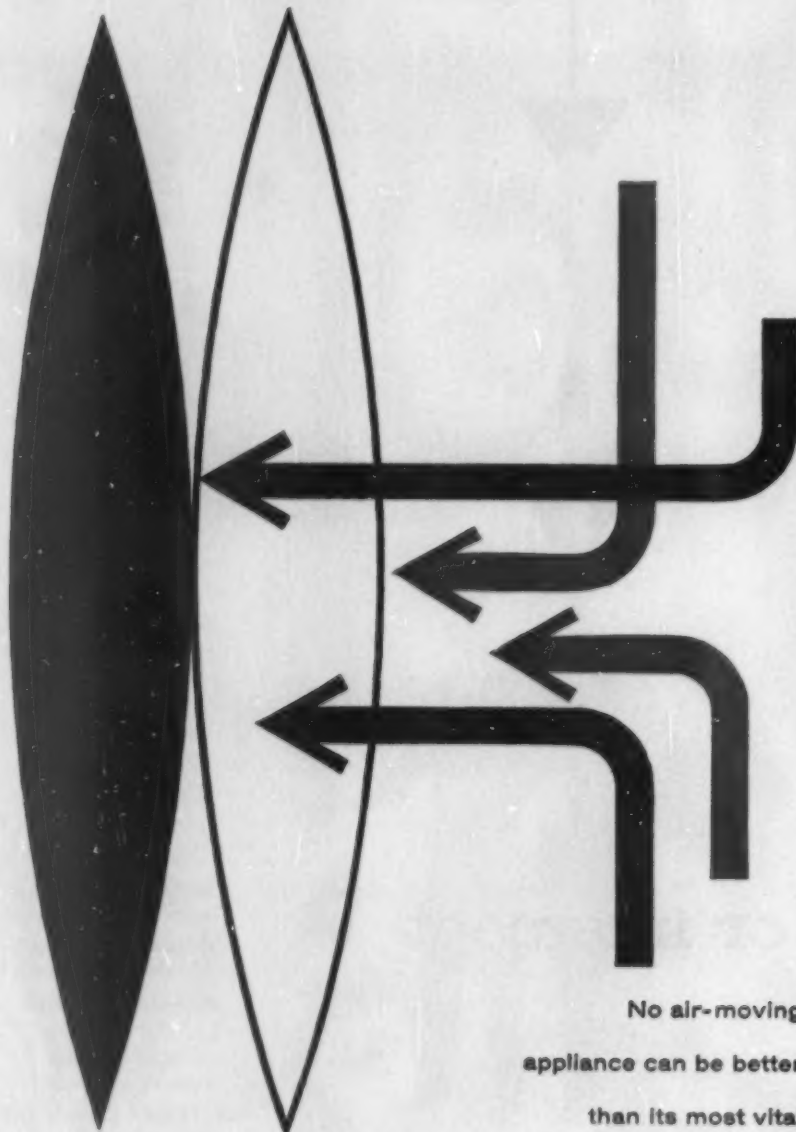
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Commission has not been previously characterized as advocating any form of Socialism."

The commission merely called to Congress' attention the much-berated task force proposal for closing 19 Veterans Administration hospitals, one near Speaker Sam Rayburn's home. A staff member says, "This was our moment to yield to practicality."

This task force of 16 experts included both doctors and veterans. That might seem impeccable. But Rep. Holifield complained that specialists produce "one-sided" reports.

• **Beefs**—Holifield also says he tried vainly for two months to get two public power advocates onto the Moreell task force on power. Rep. Wright Patman (D-Tex.) had a different complaint: the commission, seven Republicans and five Democrats, lacked party balance (the law didn't require it).

• **For the Defense**—A commission staff member puts the case like this: "The commissioners are bound to examine facts and figures and then state what they believe. They're not running for office, so they don't have to care whether their reports are popular. They're here to apply their knowledge and experience."

IV. What's Ahead?

There's reason to believe, as some of Hoover's associates say, that he regards his second commission as his definitive work in federal reform—a pattern for the future. Certainly, no one expects much immediate action.

One who knows says, "The White House doesn't swallow these reports just because the Hoover Commission makes them. It's too early to say when it will move—if at all—on any of them." Congress would have to approve most proposals, too.

One episode illustrates its attitude. Two House committees are pursuing the 60-year-hamburger theme, but none has shown any desire to study, say, overhauling the federal lending system.

• **Mechanics and Policy**—Those are some reasons why the second commission can hardly expect to fare as well as the first. The great accomplishments of the first commission were based mainly on mechanical reforms to eliminate waste or overlapping. Most of its big recommendations that were "left over" involved, to some degree, policy—the present group's primary field.

• **Money**—The Citizens Committee credits the first commission with originating reforms worth, potentially, \$4-billion a year. Already, the present proposals are estimated to save some \$1.2-billion a year. Any one, if adopted, would pay many times the commission's cost: \$2,585,059, plus \$264,950 to carry it to June 30.



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New Law Puts Glow on Copper

● It revises the tax setup to encourage U.S. companies operating in Chile to increase production and expand capacity.

● It permits them to buy local currency at the official rate of exchange.

● It gives them control over their sales—but still under Chilean government supervision.

Taken at face value, the new law regulating Chile's copper industry that went into effect early this month (BW—May 14 '55, p158) gives the U.S.-owned companies—subsidiaries of Anaconda Copper Mining Co. and Kennecott Copper Corp.—a real break.

The law, under negotiation for almost two years, changes the tax setup to encourage the companies to boost production and invest more in equipment and new development. It also permits these companies to buy foreign exchange at the official rate of exchange, thereby cutting production costs to considerably less than half what they were before. It also gives them control of their sales—with a big "if."

The new law affects more than just the businesses of Anaconda and Kennecott. Over the years, more than half our copper imports—and about 20% of our total supply of new copper—have come from Chile. In the tight supply situation of the past six months, copper users have learned that Chilean copper affairs concern them immediately and directly.

• **Old Rules**—To see what the new law does, you have to set it against the background of what went immediately before:

• Under the old system, Anaconda and Kennecott had no control over either the sales or the sales price of the copper they produced. By law, they sold it to the Central Bank of Chile, which then was free to resell it abroad. In practice, over the years, a good deal more than half of the Chilean copper came to the U.S., but Chile could, and on occasion did, hold back substantial portions of it—or route it to other markets—in order to get a higher price.

• Anaconda and Kennecott got a maximum of 24½¢ per lb. for their copper, no matter what the actual market price was. The difference between the full market price and the 24½¢ went to Chile; at the current 36¢ price for

copper, Chile's take under this provision came to 11½¢ per lb.

• The copper companies paid income taxes at the rate of 60% of their profits—the difference between their costs and sales at the 24½¢ per lb.

• They operated under discriminatory foreign exchange rates. Companies operating abroad meet their production expenses—for wages, materials, machinery, or whatever—in terms of the local currency. The more local currency they can get for their dollars, the better.

• **Big Gain**—In the case of Chile, the official exchange rate currently is 200 Chilean pesos to the dollar (the "free" or black market rate is around 430 pesos to the dollar). However, under the old law, when the copper companies exchanged their dollars for pesos, they got far less than the official rate. What they actually got varied with the use to which the currency was to be put; last year it averaged around 70 pesos to the dollar.

One clear-cut—and very substantial—gain that Anaconda and Kennecott receive in the new law is in this matter of foreign exchange. They will now get the official rate of exchange—right now, 200 pesos to the dollar.

• **Caution**—At this point, Charles R. Cix, president of Kennecott, injects a note of caution. Chilean wages are tied by law to the cost of living. At the same time, Chile has a rampant inflation on its hands; the cost of living went up 71% last year. This inflation, says Cox, could eat up much of the advantage of the new exchange setup; true, the companies will get more pesos, but they may also have to pay out more to meet their expenses. Still, for the near future at any rate, this is a real gain.

• **Big "If"**—Another key provision of the new law places control of copper sales in the hands of producers. However, there's a big question mark here. The law sets up a copper department,

made up of 11 members—of which nine are chosen by the government. Producers will have full initiative in making sales, but they will have to report all sales—along with all other data about their operations—to the department. If the department feels that sales made are not in the "national interest," it retains the right to act for the producers, receive offers and order sales.

To some, this looks as though Chile has made a big concession with one hand only to snatch it back with the other. Others feel that this is a clear go-ahead for producers to act on their own, and that they actually will be allowed a free hand as to where and how much they sell.

Right now, European copper prices are fast approaching U.S. prices (page 118). But during most of this year, prices in Europe were a good deal higher—and Chile naturally wanted to sell where it could get the highest price. The real test of this provision of the new law will come if and when this situation repeats itself. Since substantially more than half of Chilean government revenues come from copper, if Anaconda or Kennecott should prefer to sell a good part of their production in the U.S.—in spite of a higher price elsewhere—Chile might well consider this against the "national interest."

• **Sales Plan**—The new law embodies two other big changes.

One of these is that Anaconda and Kennecott will now keep the full sales price for their copper—instead of just 24½¢ as before. So long as copper stays at its current high price, this gives them an additional 11½¢—before taxes—for each pound of copper they sell.

There's a fly in the ointment, though. Copper in the U.S. got up to 36¢ a lb. under pressure of a severe shortage—at the beginning of this year the U.S. price was 30¢ a lb. The same shortage brought prices on the London Metal Exchange, at one point, as high as 46¢ a lb. Now, the worst seems to be over, both here and abroad; barring new strikes or other trouble the outlook is for easier supplies. European prices already have come down considerably and, while an immediate decline in the U.S. price isn't in the cards, it may very well be lower by the end of this year.

If prices do come down, Anaconda and Kennecott gain that much less from being allowed to keep the full price, instead of just 24½¢.

• **Tax Revision**—The second change involves the tax setup, which has been revised to encourage more production—and also to return to Chile some of the revenue it loses through other provisions of the law.

The new law sets a base production level for each company—95% of that company's average production in the years 1949-1953. Then it substitutes, for the previous 60% income tax, a basic tax of 50% plus an additional 25% surtax. This surtax is tied to production levels; for each 1% increase over the base production, the surtax goes down one-eighth of 1%. In addition, any new company that starts copper operations in Chile pays only the basic 50% tax.

For Anaconda and Kennecott, this means that their tax rate has gone up from 60% to a maximum of 75%. Production, on the average, is already a good deal above the base level, so they will not be paying the full 75%. But

even at 70%, the higher tax wipes out, for example, most of the current advantage in keeping the full sales price. And if the copper price falls, the net gain in these two provisions, on balance, will be very small.

• **Production Up**—For Chile, the big thing in the new law is the promise of higher production. Excited cables from Santiago tie several million dollars worth of new investment—with more dollar earnings and more employment for Chile—in with the new law. In the more immediate future, government officials expect production this year to be up 30% over 1954; next year up 50% over 1954.

For this year, at any rate, their estimates look conservative. In early 1954, copper was weak and producers were cutting back. This year they're producing all they can. As a result, for the first four months of 1955, Anaconda and Kennecott together show better than a 50% increase over last year.

Producers Await Gas Decision

Congressional committees are weighing action on bills to soften Federal Power Commission control over the price of natural gas at the wellhead.

The first rounds in the natural gas producers' fight to get out from under federal controls are drawing to a close. The Senate Interstate & Foreign Commerce Committee is holding hearings this week on a new natural gas law that would ease the burden of wellhead price control for the producers. The corresponding committee on the House side has completed hearings, but at mid-week had not yet voted out a bill. Most observers feel the House group will meet some of the producers' demands, but, at the same time, give consumers price protection.

• **Court Ruling**—The natural gas producers' troubles stem from last year's Supreme Court ruling in the Phillips Petroleum Co. test case. This decision put natural gas producers, who neither own nor are affiliated with an interstate pipeline, under Federal Power Commission regulation when selling to an interstate pipeline.

• **Way Out**—After the ruling, FPC lost no time in trying out its new authority. The only escape route for the producers lay in some sort of specific exemption from Congress. But political considerations run high since the issue affects the prices paid by millions of users of natural gas.

The natural gas producers do not stand alone in their bout against federal

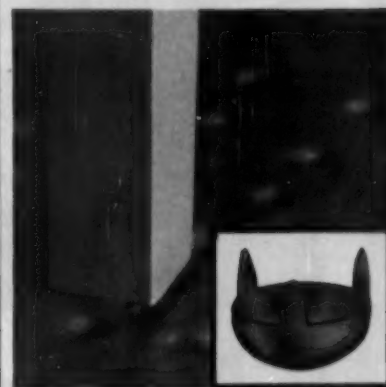
regulation. Huddling in their corner is the oil industry. Like Phillips, many companies produce both gas and oil and the oil people fear regulation of one is an opening wedge toward regulation of the other. The oil and gas producers argue that the price of natural gas at the wellhead is a very small part of the final cost to the consumer. They contend that eventually regulation will mean higher prices—because controls will limit the incentive to find new sources of supply and will make it more attractive for producers to sell close to home, rather than to long distance pipelines.

Also standing with the oil and gas people are the state regulatory agencies, such as the Texas Railroad Commission. These bodies believe federal regulation is an invasion of states' rights and warn it will cripple state conservation programs.

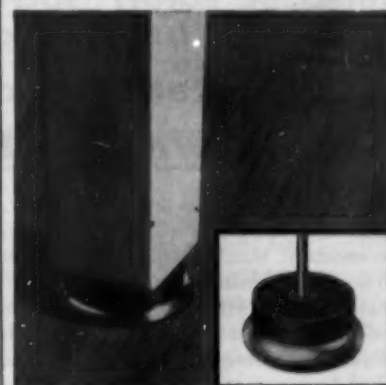
• **Opponents**—Lined up in the opposite corner are the consumer-interest groups and public officials from the big gas-consuming states. They argue it makes no sense to regulate the price of gas at one end of a pipeline without clamping down on prices at the other end, too. They fear relieving producers of controls would mean a boost of many millions of dollars in consumer gas bills.

• **Strategy**—The producers, of course,

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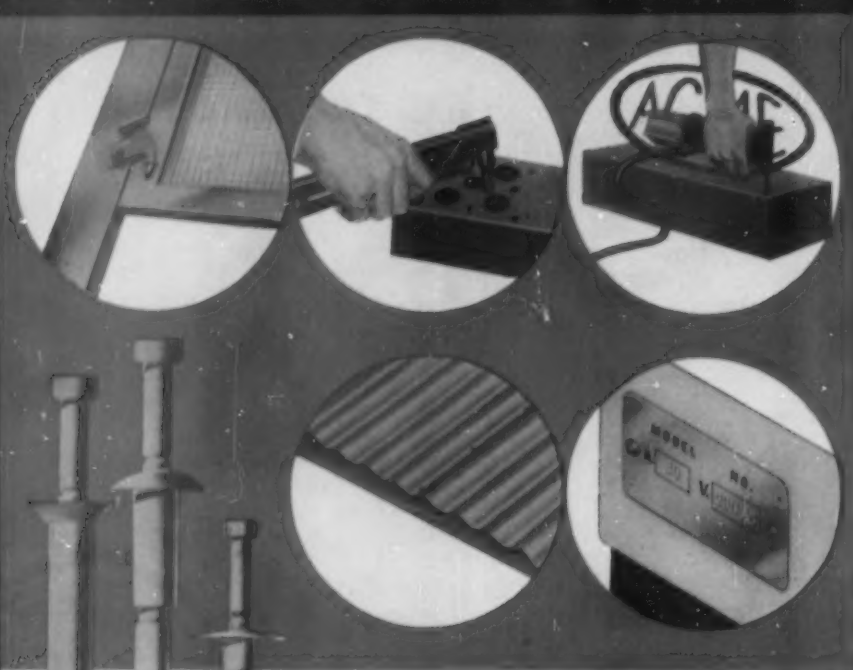


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would like a bill completely and specifically exempting prices at the well-head from FPC jurisdiction. But when bills on this line were introduced it became clear they had little chance of success. So producers will settle for a decision that would provide for regulation of the wellhead price of gas—but with the onus of control still falling on the pipelines rather than on the producers themselves.

Both the Harris bill in the House and its Senate companion, the Fulbright bill, embody this compromise. The bills would have this effect: Instead of telling the producer what he must charge for gas, FPC would be telling the pipeline what it could pay for gas.

This seems to provide only a token victory for the producers. But actually the victory would have substance. The producer himself, his operations and his records, would still be free from federal scrutiny and control. No other producer of raw materials is subject to government regulation of this sort. So even if the price finally charged and paid for the gas should add up to the same figure under producer or pipeline regulation—a big “if”—an important principle would be maintained. And the oil industry, too, would breathe a lot easier.

• **“Reasonable Price”**—The Harris and Fulbright bills put only new contracts under FPC jurisdiction; old contracts would be allowed to stand as they are. And FPC’s test for new contracts would be whether the price agreed upon is a “reasonable market price.” The definition of “reasonable market price” is a tricky one and is one of the points still in dispute. The general idea is that FPC would not be setting a price on its usual basis of cost plus a reasonable profit (it couldn’t do this, in any case, unless it were regulating the producers themselves). Instead FPC would O.K. a price if it were competitive and not out of line with conditions generally.

The bills as they stand represent a compromise between the producers and their pipeline customers, and both groups are now behind them. But the gas distributors—who deal directly with the consumer—have, by and large, refused to go along. They want FPC control of producers continued, since they feel it would mean lower prices.

Escalation clauses have been a bitterly contested issue at the hearings. Escalation clauses in natural gas contracts provide for automatic price increases. They may be “favored nation” clauses, which provide that the producer gets a boost as soon as anyone else in the same field gets a higher price, or as soon as his pipeline customer pays a higher price to another producer. Or, they may simply be clauses that provide for automatic increases over a period of time.

Natural gas contracts are often written for 20-year periods or longer, so that producers look upon these clauses as essential long-term price protection for themselves. But gas distributors and consumer-interest groups claim the automatic increases make a farce out of any kind of price regulation.

• **The Outlook**—Odds favor the House committee voting out a bill that will include some controls over escalation clauses—both in existing contracts and in future ones. The Senate committee is expected to be a little easier on producers to the extent of letting existing contracts stand as they are.

Pres. Eisenhower himself hasn't taken a stand on the whole subject of gas price regulation. Last February, his Cabinet Committee on Energy Supplies & Resources Policy went strongly on record in favor of exempting the producers from FPC control. A bill that completely exempted the producers (the Kerr bill) got through Congress in 1950, but was vetoed by Pres. Truman. Producers do not expect their compromise to go that way—if they can get it through Congress.

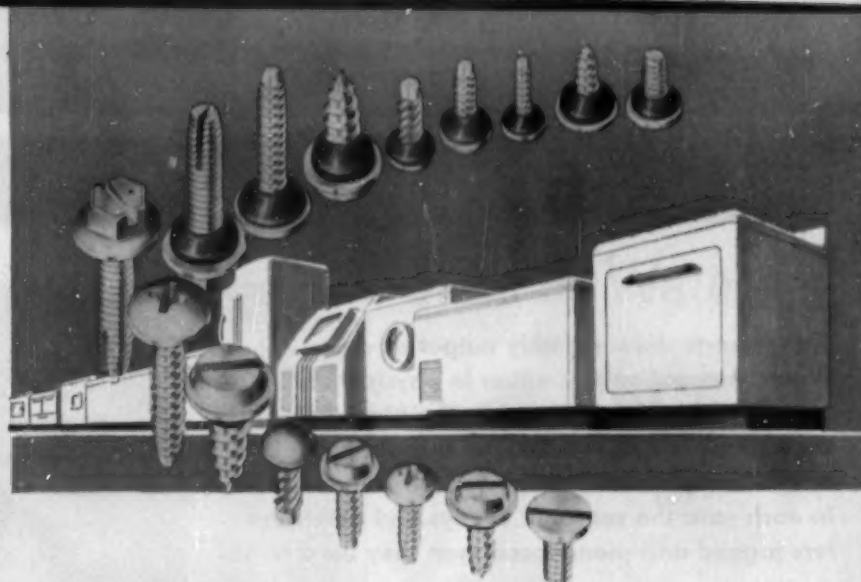
But getting a bill through Congress will not be easy. A close vote is likely. And it's fairly certain that any legislation will include considerable control over producer prices—congressmen have respect for the votes of consumers.

COMMODITIES' BRIEFS

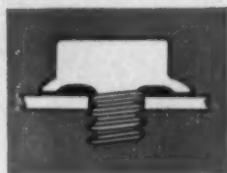
Coffee huddle: Representatives of Fedecame—an organization of Mexican and Central American coffee growers—met with Brazilian officials this week to consider plans for an International Coffee Office that would stabilize world markets and promote sales. Fedecame has already come out in favor of such an arrangement, now would like to have Brazil and Colombia join.

National Gypsum Co. will start quarrying at its gypsum deposit in Halifax, Nova Scotia, around the end of June. The company says this is the biggest known gypsum deposit in North America. It will supply company plants on the eastern seaboard, may increase their production of gypsum board by as much as a third.

Agriculture Secy. Ezra T. Benson set the national acreage allotment for wheat in the new crop year at 55-million acres—the same as this year, and the minimum allowed under the law. The wheat carryover on July 1 will be big enough to cover all domestic and export needs for two full years. Growers will vote on marketing quotas, based on the 55-million acre allotment, on June 25.



New Tuff-Tite* Fastener Is Leakproof—Holds Securely —Protects Surfaces



Neoprene washer trapped under head seals hole—acts as cushion.

Tuff-Tite is a new multi-purpose fastener that gives tight, leakproof seating without cracking

or chipping porcelain enamel and other fine finishes. It also dampens vibration by acting as a shock absorber and eliminating squeaks and chatter.

All this is accomplished by Tuff-Tite's one-piece metal head and assembled neoprene washer. When tightened, the neoprene is trapped and controlled by an undercut in the washer head.

*Trademark

The neoprene is forced into the hole and around the threads to provide a cushion which protects the surface and forms a watertight and airtight seal.

Tuff-Tite fasteners are used for quick, secure, leakproof fastening of metals and plastics. They are available as tapping screws, thread cutting screws, drive screws, machine screws, stove bolts, wood screws and special fasteners. They are made of carbon, alloy and stainless steel, aluminum, brass and other metals in a variety of head styles.

To learn more about how Tuff-Tite can give you leakproof surface protection with economy, use the coupon below.

THE FASTENING AUTHORITY
Townsend
COMPANY • ESTABLISHED 1816

NEW BRITTON, PENNSYLVANIA

Sales Offices in Principal Cities

Chicago, New York, Philadelphia, St. Louis, San Francisco

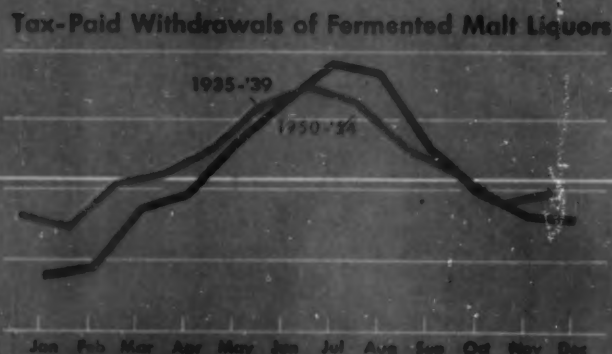
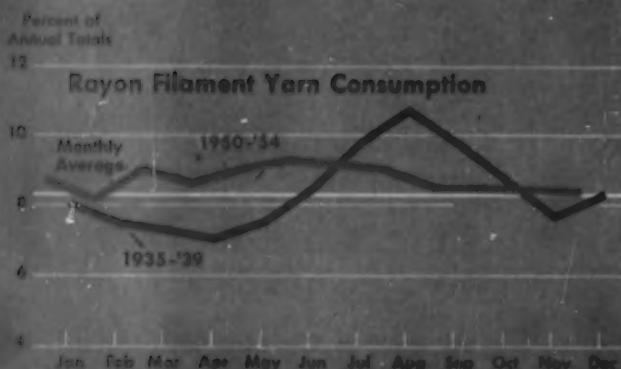
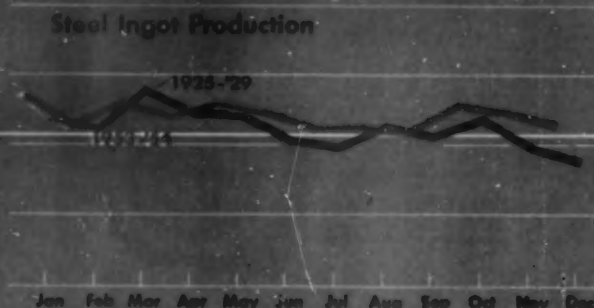
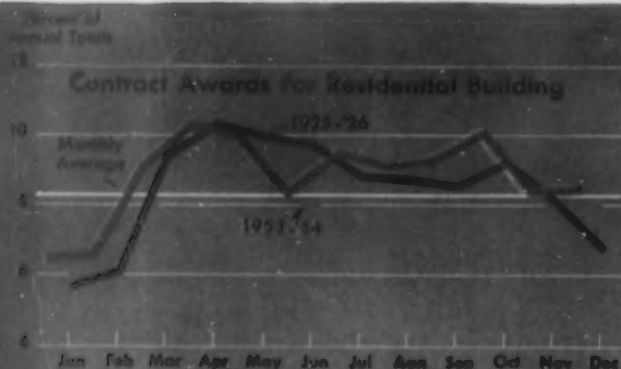
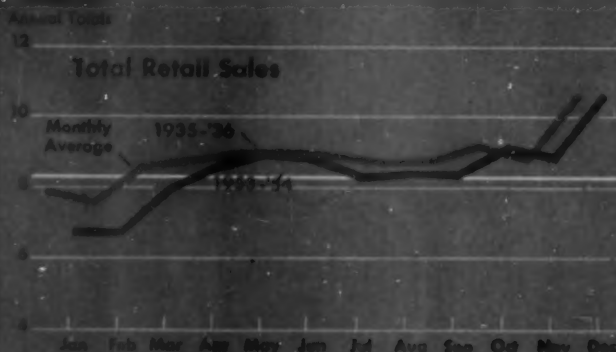
TOWNSEND COMPANY
Sales Department
New Brighton, Pa.

Please send to me without obligation "Tuff-Tite" Bulletin TL-97.

Name _____ Title _____
Company _____
Street _____
City _____ Zone _____ State _____

The Seasonal Swings Are Flattening Out

These charts show monthly output as a percent of total annual output, either in physical units or dollars, for eight industries. The black line shows how the pattern looked back in the 1920's or 1930's. The color line shows how it looks now. In each case the seasonal valleys and peaks are less jagged and pronounced than they used to be.



Getting Away From the Peaks

Fifteen years ago, if you were a paint maker who sold most of your product through retail trade channels, you would expect by reason of experience to have a highly seasonal business. You would gear your whole business operation to

wide gyrations in demand dividing the year. During your best three months in the spring, you would figure on doing 32% or so of your annual volume. In the three winter low months you would look to do only 17% or

barely half of the business accounted for by the three high months.

If you somehow stayed on the roller-coaster and were still in the same business today, you would find a very different picture. Of course, your business

a Sly Shipper... and a Glass of Water



Not so long ago, a sly shipper in Pittsburgh put a full glass of water on top of a bargeload bound for Kansas City. Didn't say anything to anybody about it—just sneaked it in on top of his cargo before the hatches were closed.

When the barge reached its destination—down the Ohio River to Cairo, up the Mississippi to St. Louis, up the Missouri to Kansas City—this sly shipper was on the dock to see the hatches opened.

There stood the glass, still more than half full. (Water evaporates, after all.) Smooth ride, wasn't it?

So now this sly shipper is a satisfied shipper—he knows that barge shipments save him money on damages as well as rates.

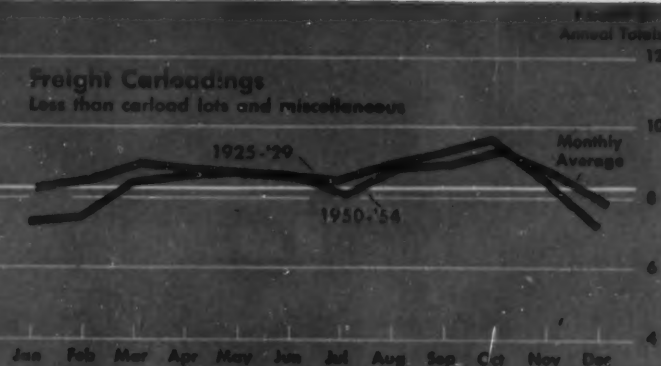
How much money would you save, shipping by barge? Your nearest F. B. L. representative has the answer.



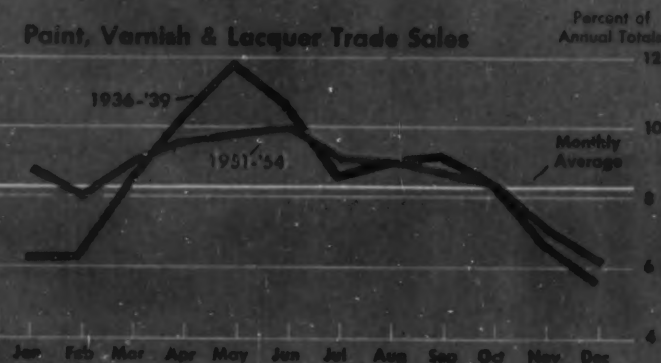
A PRIVATELY OWNED CORPORATION

Freight Carloadings

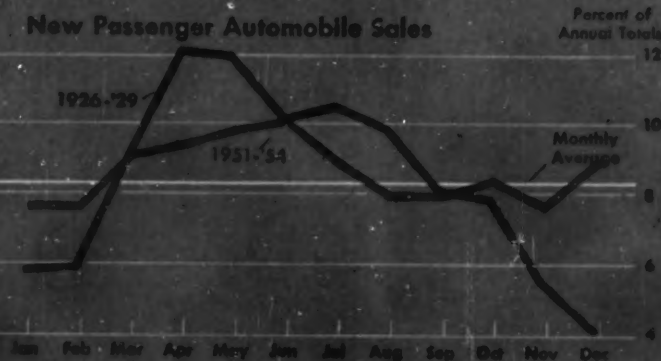
Less than carload lots and miscellaneous



Paint, Varnish & Lacquer Trade Sales



New Passenger Automobile Sales



and Valleys

would still be seasonal, but those peaks and valleys would look a lot less formidable. During three good months you could expect to do 28% of your annual volume as against 20% during the yearly low spot in the winter months—

a much happier ratio of sales peaks to dips than in pre-World War I days.

• **Trend at Work**—If this were an isolated case, there would be nothing remarkable about it. What counts is that the same kind of trend is at work in dozens of industries and in many economic areas, where there is a marked flattening-out of the sharp seasonal



EVERY OFFICE

*should have
at least one!*

The new
Smith-Corona
Carbon-Ribbon
Typewriter



A "write" equalling machines costing hundreds of dollars more!

With this Carbon-Ribbon you get an amazingly clean, crisp, print-perfect quality of "write" for executive letters, reports and special presentations. Yet the cost is only \$42.50 more than the corresponding "Eighty-Eight" Secretarial. More than that—it's the low-cost answer to preparing, right in your own office, copy for reproduction by offset, multilith, and other duplicating methods. Letter-perfect, print-perfect results.

Carbon ribbon and conventional fabric ribbon are quickly and easily interchanged. Here is a truly dual-purpose typewriter that solves many office problems, at low cost.

See and try it in your own office...



Call any Smith-Corona
Full-Line Dealer or
Branch Office (see your
Classified Telephone Directory)



At the same time see the
All-New Smith-Corona
"Eighty-Eight" SECRETARIAL—
for feather-light touch,
smooth and responsive action.

Smith-Corona Inc Syracuse 1 N Y Factories also in Toronto, Brussels and Johannesburg

*"... the leveling-out has
particular significance as
the guaranteed annual wage
becomes a possibility..."*

SEASONS starts on p. 132

variations in the volume of business (charts, page 132).

These charts are prepared from data that will be presented next week at the annual meeting of the Magazine Publishers Assn. at White Sulphur Springs, W. Va., by the industry promotion arm, the Magazine Advertising Bureau. In preparing its study, MAB pulled together considerable material from the Commerce Dept., the Securities & Exchange Commission, and similar sources. It is not original research. The important thing about it is the fact that someone has finally documented a trend of major importance in the economy.

• **Significance**—The leveling-out of seasonal peaks and valleys has a particular significance today as the guaranteed annual wage becomes more and more a possibility. Whether or not GAW is applicable to many industries depends in very large measure on the extent to which those industries can minimize their seasonal swings in output and sales.

The whole subject of seasonality in business has been arousing increasing interest in recent months (BW—Jan. 10'54, p96). As if to underscore MAB's thesis, James M. Vicary, a motivations research consultant, made a speech this week on "The Psychology of Seasons" at an advertising conference sponsored by the University of Michigan (page 140).

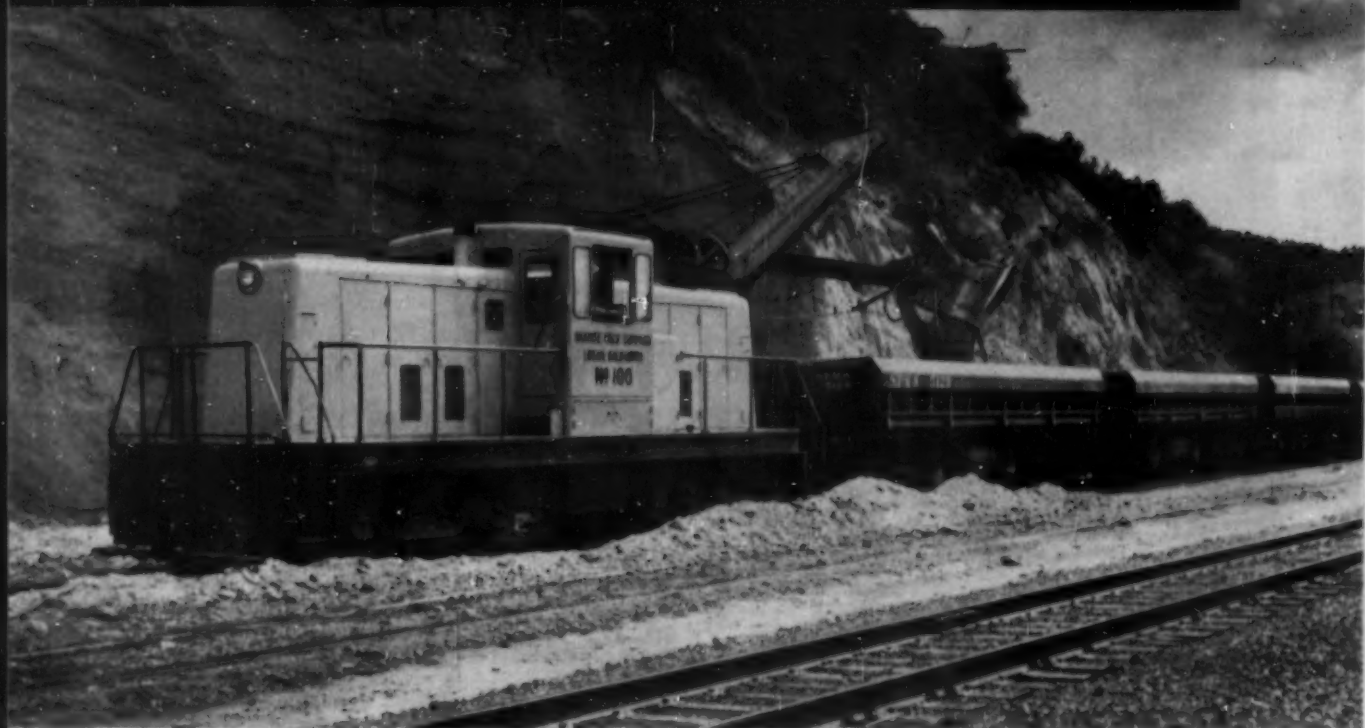
Vicary described a study made for Family Circle, one of the major supermarket magazines, that shows the relationship—or the lack of it—between the physical seasons and the "psychological" seasons as experienced generally by people (BW—Sep. 4'54, p134). His thesis was that advertisers are out of phase with seasonal reality.

• **Advertising Ups and Downs**—This explains why media are interested in seasonality and why they are pushing what research is being done in the field. One of the big troubles with advertising is that it has two traditional slumps of longstanding, one during January and February and other during July and August, when advertising linage slips and programs go off the air. What's most discouraging about this situation, from the media point of view, is put thus by MAB:

"Seasonal ups and downs in national advertising are even more pronounced than they were 20 years ago."

This is in the face of the flattening-

How much can you save with a General Electric locomotive?



G-E 65-TON INDUSTRIAL LOCOMOTIVE AT GRANITE ROCK CO. HAULS 2000-TON LOADS OVER GRADES AROUND QUARRY AND ROCK YARD.

GRANITE ROCK CO. SAVES \$10,240 A YEAR

In single-shift operation, G-E 65-ton switcher gives almost 20% gross annual return on investment

"Our G-E switcher consumes less fuel oil in one week than our old steam locomotive burned in a day," says Lee Purtil, superintendent of Granite Rock Company's main plant and quarry at Logan, Calif.

Granite Rock, like hundreds of other companies, has discovered that a G-E industrial locomotive gives the best performance at the lowest cost. For example, Granite Rock reports that its daily operating costs have been reduced by 80% since it replaced its steamer with a 65-ton G-E diesel-electric. This saving, coupled with the low initial cost of the G-E industrial-type locomotive, provides a gross annual return of almost 20%—in single-shift operation.

"One of the reasons we bought a G-E switcher rather than some other make," says Mr. Purtil, "was

that G-E engineers made a very extensive survey of our needs. They recommended the standard 65-ton unit for our requirements and proved to us the dollars-and-cents savings it would provide."

In any industrial haulage job you get the most economical and efficient service from an industrial locomotive—a locomotive designed specifically for industrial service. General Electric is the world's largest manufacturer of this type of motive power. One of the six standard diesel-electric sizes, ranging from 25 to 80 tons, may be exactly suited to your needs. For a thorough survey, contact your G-E Apparatus Sales Engineer or write for the booklet, "Switch to Diesel Electrics and Save," to Section 120-74A, Locomotive and Car Equipment Dept., General Electric Company, Erie, Pa.

Progress Is Our Most Important Product

GENERAL  ELECTRIC

There are *Plus* values behind every *Lamson* fastener

Let's say you are one of the thousands of manufacturers who consider Lamson & Sessions their regular source of supply for fasteners.

Of course, you always get the best bolts made—of top quality—and at the best price possible.

But you get a great deal *more* than this for your money. *Plus* values that don't show up on the invoice.

For instance, because Lamson is a "full line" manufacturer, you get a wide choice of fasteners and a better chance to pick the type that best suits your needs.

You're entitled to engineering service and help in selecting the most economical way to solve a fastening problem.

And because of Lamson's unexcelled "Statistical Quality Control" inspection system, rejections and returns are cut to a minimum, saving customers' time, trouble and extra expense.

Finally, and perhaps most importantly, we strive at all times to make it *easy, pleasant* and *profitable* for companies to do business with us.

The home of "quality controlled" fasteners



The LAMSON & SESSIONS Co. • General Offices: 1971 W. 85th Street, Cleveland 2, Ohio
Plants at Cleveland and Kent, Ohio • Birmingham • Chicago

"... the thrust of modern technology is pushing man away from his primary dependence on season ..."

SEASONS starts on p. 132

out process at work elsewhere in the economy.

I. Widespread Changes

The trend in the other direction has had more impact than you might have imagined.

Take retailing as a whole. The spread between the highest and the lowest months was 7.3 percentage points back in the 1930s. Now it is down to 4.7.

"Does this shift of only a few percentage points seem insignificant?" asks MAB. "Well, put it this way. If the 1935-36 pattern of total retail sales had prevailed in 1953-54, the nation's retail establishments would have had a sales volume during the first quarter of each year of \$2.7-billion less than they actually enjoyed."

What's true for retailing is true for other human activities besides the ones noted in the charts on pages 132 and 133. MAB also cites a leveling off of seasonal peaks and valleys in railroad travel, airline travel, and marriages. To these you can also add movie attendance, which has also experienced a leveling out during the year.

II. What's Behind It

Major sociological and economic changes are bringing about this change in U.S. life. In fact, the whole thrust of modern technology and industry is pushing man away from his primary dependence on season, climate, and natural environment.

One of these major forces has been, of course, the shift from a predominantly rural to a predominantly industrial society, which means that far fewer people in the U.S. today than previously are dependent on crops and crop seasons for their income. How far this shift has proceeded can be judged from the fact that today farm income accounts for a mere 5% or 6% of total U.S. income (BW—May 14 '55, p. 29). And a smaller rural market is also a much better-heeled market.

Other shifts in population have also made for a more stable seasonal picture. High on the list of such forces, says MAB, is the great shift of population in the past decade or so to the great areas of the West and Southwest, which have grown at a much more rapid pace than the other sections of the country. Since these areas have fairly constant weather throughout most

of the year, people's activities and demands are more constant the year-round than they are in more rugged climates.

Here are some of the other major changes noted by MAB:

Increased home ownership. People who own their homes, notes MAB, are "obviously likely to be less seasonal-minded than a landlord about home improvements and repairs—and the furnishings." This is one of the biggest factors behind the levelling-out of retail paint and varnish sales noted earlier.

Larger families. "Children are notoriously inconsiderate about the month of year when they are born—or when they need a new pair of shoes."

Wider income distribution. "Far greater leeway in the average family budget has also served to flatten out seasonal curves. With more money to spend, expenditures need not be so rigidly budgeted. . . . If new sheets are needed in October, for example, Mama is less inclined to wait for the January White Sales."

Increased leisure time. This has created a whole new array of wants and has spread vacationing throughout the year.

Rural improvements. Hard-surface roads have given access to town in any season for even the most remote areas.

Add to this a vast assortment of technological and economic changes that have reduced dependence on season and weather. The spread, first, of central home heating and, more recently, of air conditioning, together with the enormous increase in auto transportation, have helped to establish lightweight, all-year-round clothing and to make it possible for people to carry on a lot of activities that formerly would have been limited to certain seasons.

On top of this, there have been such significant developments as the growth of installment credit and of other forms of credit, which are making it possible for people to plan ahead to do a lot of things, rather than wait for necessity or season to force them.

III. Psychological Aspect

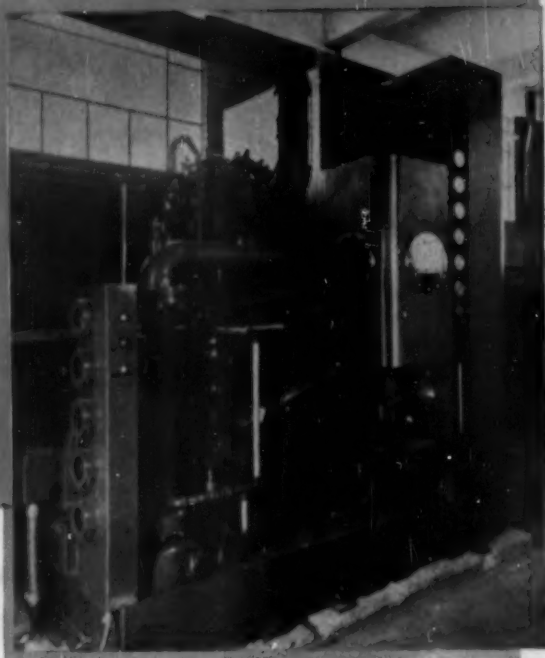
In the face of all these changes, the trend in advertising seems all the more curious. MAB shows that the three high months for magazine advertising volume have taken a successively larger share of total magazine advertising volume over a long period of years. Back at the time of World War I, they accounted for about 28%; now they are up to about 31%. Why has advertising gone the other way?

• **Partial Answer**—Vicary's talk at Ann Arbor supplies part of the answer to this question:

"Unless you are an astrologer, you

Does your plant use OXYGEN?

JOY OX-20
OXYGEN GENERATOR
in a Steel Mill



- A You can cut your costs as much as $\frac{2}{3}$!
- B . . . with a machine as easy and dependable to operate as any air compressor.

If your oxygen consumption ranges between 600,000 and 4,000,000 cu. ft. per month, a Joy OX-20 high-purity Oxygen Generator may pay for itself quicker than any other capital goods investment you could make.

You can save up to $\frac{2}{3}$ of your present oxygen costs—and without any headaches! The OX-20 is automatic in operation and safe. It requires no chemical materials and very little water. As evidence of dependability, Joy units have answered some of the most difficult generator problems ever devised by the Army and Navy, proving themselves superior to all others!

WRITE FOR BULLETIN F-103. The Joy Generator is also available as a simultaneous producer of 99.5% pure oxygen and 99.9% pure nitrogen. **Joy Manufacturing Company, Oliver Building, Pittsburgh 22, Pa.** In Canada: Joy Manufacturing Company (Canada) Limited, Galt, Ontario.



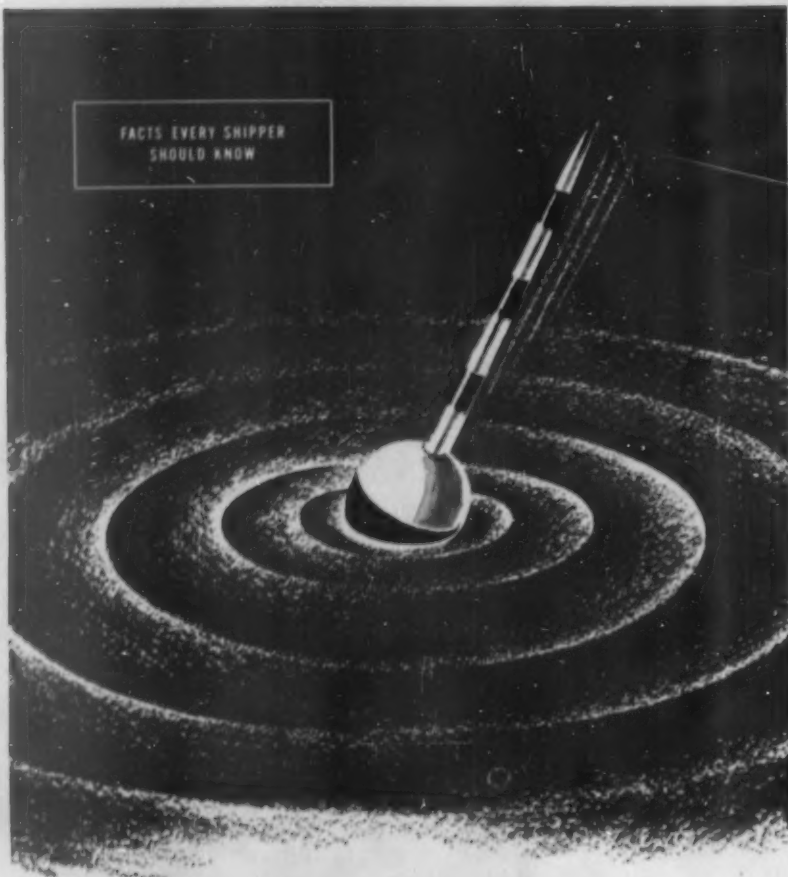
Consult a
Joy Engineer

JOY

SPECIALISTS IN THE COMPRESSION AND
MOVEMENT OF AIR AND GASES SINCE 1885

W&D 12602

FACTS EVERY SHIPPER
SHOULD KNOW



nibble?

You can lose your bait in shipping, too. Damage claims and complaints can nibble plenty at your profits. Ship in Fort Wayne corrugated containers that are quality built and specifically designed to keep those costly claims and rejects away from *your* line. Cast your inquiry our way. You'll get a strike.

Fort Wayne

CORRUGATED PAPER COMPANY

GENERAL OFFICES • FORT WAYNE 1, INDIANA

Corrugated Fibre Boxes • Corrugated Paper Products



don't think the sun governs seasonal trends in business 100%—or weather, or climate. In the minds of men there is a curious psychological orientation that says, 'now,' to spring or some other time of the year."

Vicary's studies for Family Circle show that actually the domination of any one season in people's thinking is not tied to the calendar. For example, word association tests show that summer is uppermost in people's minds from early June until early September. Advertising does not, however, conform to these patterns of behavior.

• **Form of Habit**—Sheer habit and custom, thinks Vicary, have been responsible for advertising's failure to follow the trends of business. Take the winter lull in advertising, which is due to the fact that advertisers tend to lay off advertising while they are figuring out the budgets for the coming year. Here the timing is determined by the fiscal year most companies observe, not by the facts of consumer demand. The summer lull, on the other hand, is premised on the traditional viewpoint that summer simply isn't a good selling season for a lot of goods.

Again, Vicary thinks, custom is the villain. He feels that over the years advertisers, having observed what they thought was seasonal behavior on the part of consumers, have been compounding the original overstatement. They have done this by promotion, by pushing certain wares at certain times of the year. This naturally exaggerates seasonal patterns.

• **Classic Example**—Detroit offers the classic example of how advertising, selling, and promotion can artificially prop up seasonal demand, and exaggerate it.

Seasonal selling patterns have been changed by Detroit on several occasions (BW—Apr. 9'55, p80). There's one way in particular that you can manipulate sales if you are a car maker: You can change the timing of your introduction of new-car models. Traditionally, new cars begin appearing in November, during the dull season in the car business, so that they can be pushed in the spring, which is the time people are supposed to rush to showrooms to buy some spanking new car so that they can go out and burn up the roads.

But during the Depression, at Pres. Roosevelt's request, new-car models were introduced earlier in the fall. The reasoning: Sales didn't need a boost in the spring, but they did in the fall and winter, when unemployment rose in Detroit.

Another instance is provided by Ford Motor Co., which in 1953 accomplished a feat in the auto industry by selling many more cars in the second half than in the first half, a reversal of the ordinary pattern.

But Who Can Guarantee The Market?

Current negotiations between the United Automobile Workers and car manufacturers are arousing exceptional interest, because they are concerned with the issue of the guaranteed annual wage—or, as the UAW prefers to call it, the Guaranteed Employment Plan.

The Basic Fallacy

The guaranteed wage is being widely discussed from many viewpoints. Can employers afford it? Would it cause price inflation? Would it restrict increases in cash wages? Would it lighten or aggravate business recessions? Would it increase or reduce employment? Would it raise or lower standards of living? Would it make unemployment more attractive to workers than employment? Would it force small, weak, and struggling concerns out of business? Who would really pay for it—employers, workers, or consumers in general? These and many other questions are being raised.

There is one basic objection which the proponents of wage guarantees do not seem to have faced. This is that, in the final analysis, it is not the employer who hires labor and pays wages. It is the consumer. The employer is merely an agent, an intermediary. The ultimate demand for labor can come from only one source: the buyer of the product. It is he alone who determines what things shall be produced, and how much of each. To ask the employer to guarantee employment or wages is to hold him responsible for the behavior of consumers, over whom he has no control.

All the way through the argument for the guaranteed wage runs the assumption that it is the employer's duty to provide stable employment. The booklet on the Guaranteed Employment Plan published by the Education Department of the UAW states flatly that the costs of the guarantee "are essentially penalties for failing to provide steady work." These penalties are defended on the ground that "when employ-

ers fail in their responsibility to provide steady work, they have a moral obligation . . . to see that the workers and their families do not suffer."

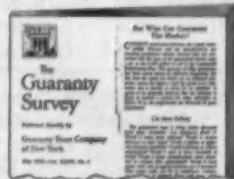
No Guarantee of Demand

The desire of a union to find safeguards for the welfare of its members and their families is natural and legitimate. The tendency to look to the employer for such safeguards also is understandable, since the employer is the most accessible party and the most visible source of funds. Yet he is not the real source. He cannot assume the full responsibility for providing steady work, because the decision does not rest with him. His capacity to provide work is both created and limited by the market for his product.

When employees ask for a guaranteed wage, they are in effect asking for a guaranteed demand for their labor. The aspiration is easy to understand but impossible to meet, because the demand for labor is determined by the demand for the products of labor, and in a free society this can be guaranteed by no one. Employers also would like to have a guaranteed market for their wares, but who is to give such a guarantee? The only way to guarantee final demand would be to reverse the whole economic order and, instead of requiring industry to produce what consumers want, require consumers to buy what industry might choose to produce. This is a height of regimentation which even so-called totalitarian regimes have not ventured to enforce.

From the May issue of THE GUARANTY SURVEY, monthly review of business and economic conditions published by Guaranty Trust Company of New York.

The complete issue is available on request to our Main Office, 140 Broadway, New York 15, N. Y.



Guaranty Trust Company of New York

Capital Funds \$395,000,000

140 BROADWAY

FIFTH AVE. AT 44th ST.
LONDON

MADISON AVE. AT 60th ST.
PARIS

40 ROCKEFELLER PLAZA
BRUSSELS

Member Federal Deposit Insurance Corporation

Customers: They Won't Stay the Same

ADVERTISERS and admen continued their fascinated pursuit of the consumer last week. Anyone attending the University of Michigan's advertising conference at Ann Arbor could only conclude that in the long run the poor innocent doesn't stand a chance. All the resources of the U.S. production and merchandising—and academic—experts are bearing down to make him buy.

The broad subject of the conference was the changing consumer. As the crowded day wore on, two main questions developed: (1) What is it that this elusive bird has changed from and to? (2) How can you catch a market that is so constantly in social and economic, as well as physical, motion?

Partly because the 200-odd manufacturers and advertising men at the conference have already accepted the fact of change as an ABC of modern merchandising, question No. 1 seemed to interest them less. Yet the *whys* and *whats* of the changes brought out some points worth considering.

OBVIOUSLY, the consumer's better stocked purse has an overwhelming importance. Yet, time and again, the point came up that here is more than a quantitative change. The consumer not only wants more of the things his "betters" have had. The psychology of prosperity—and the psychological aftermath of World War II—have created new kinds of wants, new standards of quality and taste.

Samuel Stouffer, Professor of Sociology and director of the Laboratory of Social Relations at Harvard University, hammered home this point. The rising level of education, especially among the white collar worker, has led the consumer to wants he never suspected. A college education is becoming a prerequisite even for white collar jobs—but its effects do not stop at the purely economic level. Arthur A. Potter, vice-president and director of media at J. Walter Thompson Co., also referred to the "cultural explosion" of the past decade as something that advertisers should heed.

Stouffer commented that the advent of more second, third, and

fourth babies is one of the larger forces working to change the consumer's focus. Prosperity had a hand in this. But prosperity isn't explanation enough—for in the 1920s, small families were the order of the day among the well-to-do.

No one at the conference explained this phenomenon. It seems likely that in part it represents a reaction against the enforced family constriction of the depression.

Along with family growth comes the whole suburban movement. But more important in changing the consumer's make-up, Stouffer believed, is this: the tendency of new, young families to split off from their parents.

Everyone knows how this "undoubling" created new demands for housing and home furnishing. Stouffer saw the trend as far more revolutionary. The split-off, he said, releases the younger generation from the yardsticks of their forebears in taste and values.

Stouffer did not enlarge on this point. But its marketing implications are enormous. With the rising economic and education level, this release could prove an invitation to scrap a whole system of living, and with it all the accessories of the past. It could make a lot of things in people's pattern of living obsolete—a millenium that many devout advertisers pray for daily.

STOUFFER's analysis of what makes the consumer different was developed by Donald B. Armstrong, Jr., vice-president and director of research at McCann-Erickson, Inc. Money in the bank and plenty of goods to choose from have given the consumer new reasons for buying. Back in 1938, Armstrong said, a man bought a car as an aggressive assertion of his ego. Today, he can't get along without one. At the same time, the attitude of the lower-income groups toward buying has become more like the attitude of the rich: They are shopping not for functional values but for style.

Stouffer's thesis on the new psychological freedom of the young consumer has some bearing on

Armstrong's comments on the housewife's new freedom from drudgery. Yet Armstrong made it clear that the housewife finds her freedom a prickly crown. She has a freedom that leaves her wondering what she is free for. Mechanization has depreciated her job as a homemaker. She has lost her place.

George Horsley Smith, Associate Professor of Psychology at Rutgers University, also underscored the consumer's confusion in the face of an overabundance of choice.

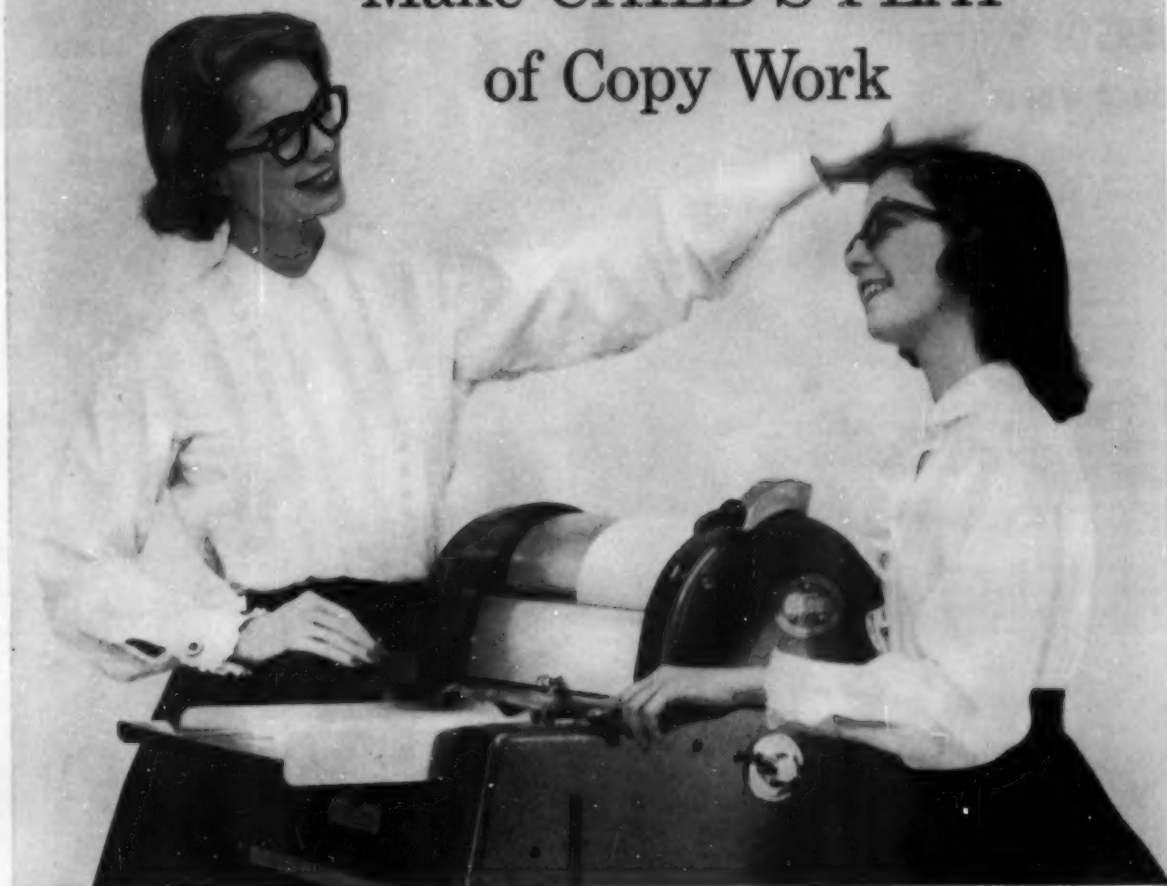
The smart merchandiser will capitalize on the consumer's confusion. But to do so, he has to know what's working on the consumer.

This leads straight to the door of that now fabulous tool, consumer motivation. Professor Smith explained how through "focused group interviews" trained interviews could shortcut the usual research processes, get valuable clues on how consumers really feel about butter vs. margarine, for example.

Armstrong had some pertinent points on how the advertisers can utilize his knowledge. If the housewife is worried that her job has lost its importance, he said, reassure her. Show her how she can become a creative artist at home-making—presumably by using your product.

THE conferees admitted that the research tools themselves aren't yet sharp enough to cut down to what Smith termed the minutiae that may reveal the consumer's attitude—and make a sale. But they have no doubt they will get the answers. To show to what lengths the researchers will go, Armstrong cited this case. His experts set out to find why people drink. The two main answers were for sociability, and to relax. Then a practical experiment proved some of them were wrong. While the researchers conscientiously drank Cokes, they plied their subjects with stronger potions. They learned that, of those who said they drank for sociability, half did indeed get more sociable as they drank. The other half simply found they could stand their friends better.

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AN OLD TOWN SPIRIT DUPLICATOR is clean and foolproof. There are no costly stencils or mats, no messy inks or gelatins, no cleaning up later. Simply write, type or draw on an Old Town master unit and place it on the machine. Copy paper moistened with a clean, alcohol-type fluid picks off up to 500 crisp, clear copies faster than one a second. And you get up to six colors at once!



*World's foremost maker
of carbons, ribbons,
duplicators and
duplicating supplies.*

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Please send me further information about Old Town spirit duplicators including rental plan, free trial and trade-in offer.

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Hopes for the future notwithstanding, Jessop lays no claim to being the largest specialty steel maker in America, but careful check shows it to be the most diversified. We produce the greatest variety of special steel products, shapes and sizes available anywhere. There's a profit story in this for Jessop and for you, too. We profit by spreading ourselves across a greater segment of industry. Like a modern investment trust we avoid the ups and downs of vertical markets. Our current sales success proves the point. You can profit if you come to Jessop for more of your requirements and obtain the service and delivery advantages that single-source purchasing affords. What's more, you'll enjoy doing business with the Jessop team . . . aggressive men eager to earn their salt by helping you in your business. Check the list on this page and pick more products to buy from Jessop. You'll be glad you did.

Products

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- HIGH SPEED STEELS
- NON-MAGNETIC STEELS
- HIGH SPEED TOOL BITS
- HEAT RESISTING STEELS
- STAINLESS-CLAD PLATES
- TOOL STEELS FOR SPECIAL PURPOSES
- CARBON AND ALLOY STEELS
- EASY-TO-SHAPE TOOL STEELS
- HIGH SPEED AND ALLOY SAW STEELS
- TEMPERED AND GROUND STRIP STEEL
- COMPOSITE HIGH SPEED STEELS
- STAINLESS AND HEAT RESISTING CASTINGS
- COMPOSITE DIE STEEL SECTIONS
- PRECISION GROUND FLAT STOCK
- DIE STEELS—HOT AND COLD WORK

JESSOP

STEEL COMPANY • WASHINGTON, PENNSYLVANIA

Chain Adds Link

Kroger, third biggest supermarket group, pushes a new frontier as it buys 26 Texas stores.

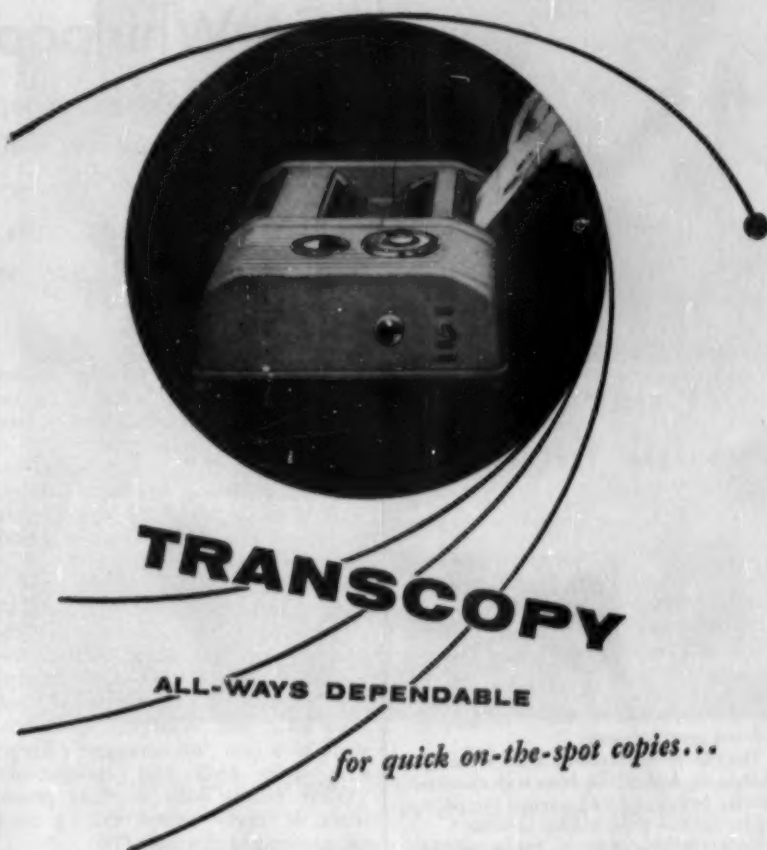
Kroger Co., the nation's third biggest supermarket chain behind A&P and Safeway, pulled a surprise deal last week: It bought control of Houston's Henke & Pillot, Inc., a thriving chain of 26 Texas supers that rings up an estimated \$50-million a year in sales.

Henke's healthy volume gives a welcome fillip to Kroger's annual sales of \$1-billion-plus. More than that, the deal gives Kroger entree to the lush Houston market, where few national retail networks have managed to get a foothold. Perhaps most important of all, it gives Kroger a chance to take some merchandising lessons from the savvy local chain. For one thing, Henke's has made a go of soft-goods and appliances—lines that Joseph Hall, Kroger president, admits his chain has been disappointed in. Henke's formula: upgraded quality, brand names, and maintained prices.

• **Pressure**—Henke's is best known for its hot rivalry with Houston's other homegrown super chain, H. Weingarten, Inc. (BW—Jul.11'53,p94). While Henke spars gravely with Weingarten's, the fact is that it could never quite hope to catch its big rival. Henke's net profits have tumbled since 1951 from over \$500,000 to \$125,000—while Weingarten's have grown to \$850,000 on a sales volume of about \$60-million. That fact may have pressured the sale to Kroger. For another thing, there were indications Henke's president, W. D. Sutherland—head of the family-controlled company—wanted out after a career of 50 years in retailing.

In line with Kroger's admiration for the Henke operation, the big Cincinnati chain will make few changes in its management or merchandising operations. Henke's will be operated as a subsidiary of Kroger's.

• **Control**—Kroger apparently hand-picked Henke's after surveying the field. Even before the deal was announced last week, Houston was buzzing with rumors. Henke stock, which had been riding along at \$3.50 to \$4, suddenly shot up to \$7.50. When the final arrangements were made known, Kroger revealed that it was buying 60% to 70% of the 150,000 shares of Sutherland family controlling voting stock at \$9 a share—and would offer the same price for all 600,000 outstanding shares of nonvoting stock. At this price, Kroger expects to harvest it all.



Consider the advantages of producing sharp, accurate copies of originals up to 26" wide right on your own premises ...at a moment's notice. Whether they're printed or typed sheets, sketches, drawings or charts, colored or black on white, one or two sides... it makes no difference! Transcopy copies anything... on white or any one of five colored papers ...even card stock.

• You do NOT need a darkroom and there is no plumbing, wiring or special installation. Place Transcopy on a convenient desk or table... in ordinary lighting. Plug into any standard electrical outlet and it's ready to produce as many finished copies as you need... in record time. It's so very simple to operate, anyone can quickly make positive prints of the highest quality.

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There are many ways in which the Hartford Agent can protect you against loss. Here's an actual case:

A smart dog's alarm...

saved these fire-threatened sleepers from personal danger. But their home had already suffered severe damage.



Thanks to a Hartford Fire Insurance Company Agent the loss was covered. Shortly before, he had warned the policyholder against reducing his insurance.

Expert insurance advice can be valuable. Let your Hartford Agent or your insurance broker advise you.

*Year In and Year Out You'll Do Well
with the*

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Northwestern Fire & Marine
Insurance Company
Twin City Fire Insurance Company
Minneapolis 2, Minnesota



RCA-Whirlpool Merger?

TV maker again reported moving into full line of kitchen appliances, via Whirlpool washers and Seeger refrigerators . . . Fair traders turn to anti-loss-leader laws in state courts . . . Auto parts maker sells car air conditioner through Sears . . . Court asked to put "Davy Crockett" in public domain . . .

Radio Corp. of America seemed closer than ever this week to getting deeper into the kitchen appliance business with a full line of products.

Trade talk that RCA has long wanted into this field—and will eventually get into it—has persisted for several years. Red-hot rumors have sprung up periodically, only to be squashed by RCA officials.

This week, for the first time, RCA's top executives refused to deny the latest speculated merger—a three-way tieup between RCA, Whirlpool Corp., and Seeger-Sunbeam Corp. At mid-week RCA and Whirlpool spokesmen stuck to a firm "no comment"; Seeger Pres. John Holl said ambiguously, "We're talking with so many people about so many things that I can't say anything at this time."

A key figure in any possible merger between the three manufacturers is Sears, Roebuck & Co. RCA makes Sears' TV sets (Silvertone), Whirlpool its washers and dryers (Kenmore), Seeger its refrigerators (Coldspot).

RCA makes a few ranges in addition to its radio and television sets. Whirlpool and Seeger would complete a major appliance line for RCA. At the same time, Sears would stand to benefit from a consolidation of its private brand suppliers. Sears officials—who term the merger "no ridiculous rumor"—and admit a full line RCA might give Sears some new competition in the full appliance line field, but point out that, in view of countervailing advantages, Sears "could live with" the added competition.

Just what corporate form the merger would take was also a matter for considerable conjecture this week. Most observers felt that RCA would become the parent company. But Whirlpool, because of its strong financial position as the biggest maker of automatic washers on the market, figured to get some concessions to sweeten the deal for its stockholders, according to trade reports.

anti-loss-leader legislation in state courts as a last ditch effort to hold their price lines.

In Colorado and Arkansas last week, cases involving the seldom-used state Unfair Practices Acts were filed to halt rounds of price cutting—in these instances between grocery stores.

The Colorado case points up why and how "unfair trade" statutes may be used as a substitute for "fair trade." Last winter the Colorado state supreme court held fair trade unconstitutional (it was the fifth state court to rule this way).

So, in the present case, a small Denver independent, Standard Store, is using the state unfair practices act—which bans selling at prices below cost plus "cost of doing business"—against the state chain of Safeway stores and the local King Supermarket chain. Standard is asking the court to issue a restraining order against the super chains, forcing them to reprice their items at 14% above invoice cost. Standard is also asking \$60,000 damages. The case was scheduled for hearing this week.

In Arkansas, it's the state retail grocers' association that has become the local champion for fair trade. Arkansas' state supreme court has also held the local law unconstitutional, and price wars—particularly in the grocery field—have broken out all over the state. The association is asking court orders against a whole string of stores to enforce Arkansas' unfair practices law, which also forbids sales below cost plus "cost of doing business."

The attempt to use so-called unfair trade laws to hold up fair trade minimum prices is new and significant—especially so because of the recent Justice Department hint that it might consider a national unfair trade law to replace fair trade, which it violently opposes (BW—May 14 '55, p118).

Anti-fair-traders have suggested for years that unfair trade laws are all that are needed to stop the infrequent practice of selling name brand items at or below cost in order to "lead" customers into a store. Supporters of fair trade, on the other hand, say bans on loss-

"Fair traders" are turning to so-called

leader selling don't effectively do the job of maintaining a healthy retail price line.

Eaton Mfg. Co.—automotive parts maker—is hedging against new competition from its customer car manufacturers by moving into the consumer products field.

Eaton's first consumer product is an air conditioning unit for autos, which it will merchandise through Sears, Roebuck under the Sears Allstate trade name.

With the prospect of auto makers' moving more into parts manufacture because of the guaranteed annual wage, Eaton is looking for new business. Auto conditioning units are familiar to Eaton—it developed American Motors' new, comparatively low-priced (\$395) combination cooler-heater model that helped break open the market last year (BW—Mar.20'54,p190). The new Allstate is similar, and even cheaper—\$299 plus a Sears installation charge of about \$45.

Eaton started selling the units through Sears this month in the South and Southwest, figures on getting national distribution rolling by the first of June.

Eaton and Sears are sure that auto conditioners have graduated from the expensive gadget category into a substantial mass market. In fact, Sears' original order for 100,000 Eaton units equals previous estimates for total 1955 sales of all makes.

The Justice Dept. filed its publishers' antitrust action in New York federal district court last week (BW—May7'55, p41).

Included in the suit were the American Newspaper Publishers Assn., the American Assn. of Advertising Agencies, and four other publishers' groups—the Publishers' Assn. of New York City, Associated Business Publications, Inc., Periodical Publishers Assn. of America, and the Agricultural Publishers Assn.

The long-rumored suit, tipped off at an ANPA convention in New York last fortnight (BW—May7'55,p41), charged price fixing and restraint of trade in advertising. The suit asks the court to enjoin publishers from their system of recognizing ad agencies and setting a flat 15% commission for their services.

Justice had held up filing the suit to give the defendants a shot at settling out of court. But antitrust chief Stanley Barnes indicated last week he thought any further talks would be "fruitless." Barnes says Justice still be-

AS TIME GOES BY



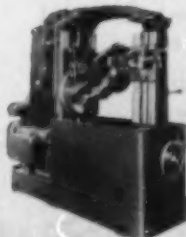
Museum Piece

High Cost per Piece

Time is both the great healer and destroyer. It heaps added value on some things... decay and degeneration upon others.

Machine tools are among those things with which time deals harshly. With every turn they approach obsolescence... some at breakneck speed, others with a creeping slowness that sometimes defies detection.

The tax laws say age determines the productive value of machine tools. Production men know better. It's obviously the amount of use that wears them out. Even when they're not run at peak capacity, improvements in new machine tools make old ones a costly burden on efficient production.



Lees-Bradner can demonstrate to you why old hobbers and threaders are a costly luxury. Increased scrap, more labor dollars, waste plant space, are only a few of the tolls old machines levy on manufacturers.

Why not invite a Lees-Bradner representative to talk it over with you? Or write us direct.

THE LEES-BRADNER MODEL R HEAVYWEIGHT HOBBER...
FOR THE REALLY BIG, TOUGH HOBBERING JOBS

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CLEVELAND 11, OHIO, U.S.A.

Company



IF YOU THREAD OR HOB... GET A BETTER JOB WITH A LEES-BRADNER

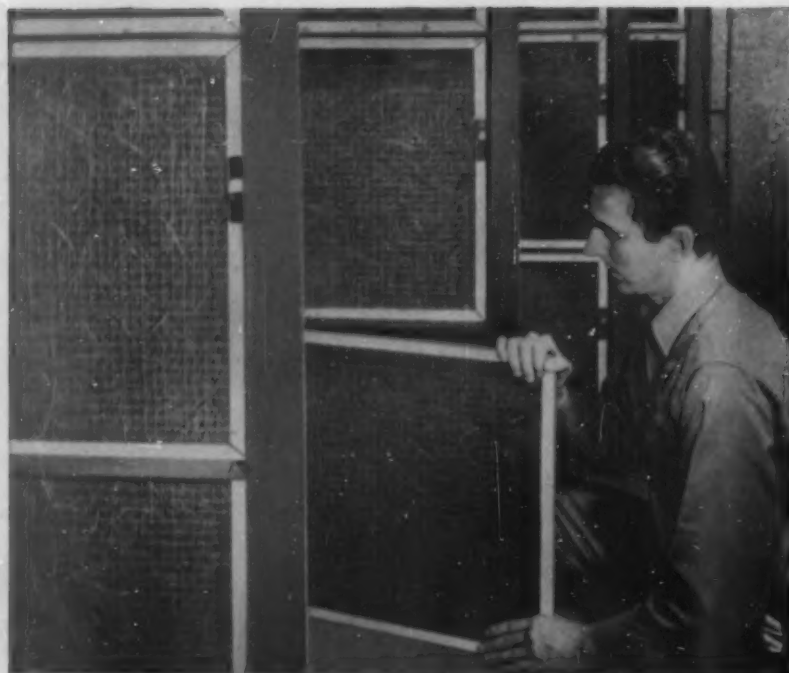


Photo courtesy The Rotor Tool Co., Cleveland, Ohio

3 years' trouble-free air filter service

—REPORTS PORTABLE TOOL MANUFACTURER

TO REDUCE operating costs, a Midwestern toolmaker completely air-conditioned his plant. It paid off in fewer rejects caused by dirt and rust, reduced tool re-setting on close-tolerance machining and 5% greater efficiency—all at a yearly cost of 1% of labor and overhead.

Contributing to this low cost is his use of **PLIOTRON**—the world's first truly washable, electrostatic, panel type air filter—to clean up to 50,000 c.f.m. of intake air prior to heating or cooling. Just two sets of **PLIOTRON**—cleaned and alternated only once a month—have cleaned the air for three full years without problem or replacement.

PLIOTRON is super-efficient. Its plastic filter medium attracts and captures up to five times as many fine particles as ordinary filters. And it depth-loads, not surface-loads. When finally dirty, it is easily restored to full efficiency by a quick bath—properly installed and maintained lasts the life of the unit on which it is installed.

Greater efficiency, from any forced-air heating or air-conditioning system using panel filters, is yours with **PLIOTRON**. Call your **PLIOTRON** Distributor. Or write Goodyear, P.O. Box 288, Akron, Ohio.

CLEANER, HEALTHIER AIR for your home, too, is possible when it's protected against air-borne dust and dirt with **PLIOTRON**—the filter that's really an air cleaner.

Pliotron—T.M. The Goodyear Tire & Rubber Company, Akron, Ohio

PLIOTRON Air Cleaner by

GOODYEAR

THE GREATEST NAME IN RUBBER

lieves in pre-filing negotiations, but that they just didn't work in this case.

Literally and legally anyone can cash in on a famous name like Davy Crockett.

At least that's the contention of two suits filed last week by Walt Disney Productions and Rudin & Roth hosiery company against Davy Crockett Enterprises, Inc. The company bearing the famous frontiersman's name was formed back in 1947 to license clothing manufacturers who wanted to use the name. The licensing company even registered the name as a trademark.

Disney and Rudin & Roth, however, claim in their suits that Davy Crockett Enterprises has no right to the name, no right to license anyone else to use it.

The hosiery manufacturer, and the filmmaker whose TV shows helped give Davy Crockett his current rage of popularity, both claim that the name of any famous person is in the public domain, and can be used without paying royalties. They also claim that Davy Crockett Enterprises went out of business in 1949, and that the trade name stood in disuse and abandonment for six years, thus making it further invalid now. Disney's suit also asks damages.

The cases were kicked off when Davy Crockett Enterprises recently sent letters to manufacturers and retailers, cautioning them not to use the name of the pioneer without a license from the company. Eight clothing manufacturers are licensed, the company claims.

Quantity discounts in milk pricing boosted Northland Milk Co.'s sales 20% during the past year, upped its home deliveries 41%.

These are the hopeful figures Northland—a Des Moines dairy—came up with last week, as it researched its market 10 months after putting its quantity discount plan into effect (BW—Nov. 20 '54, p126).

Purpose of the plan, originated 15 years ago by Northland's Edwin Elwell, is to win back to home delivery some of the milk market that dairies have been losing to supermarkets. Like other similar plans, the Northland so-called "QD" program is based on a sliding price scale—the first quart of milk you have delivered to your home in Des Moines, for example, costs you 26¢, additional quarts only 16¢ each on any one delivery trip.

THIS IS FOR MEN...

...Who are interested in the design, engineering and construction of petroleum refineries, and chemical plants

A \$3-million vinyl acetate monomer plant goes up in Calvert City, Ky., directly across the world from a \$50-million petroleum refinery at Bombay, India. A new ammonia plant is to go on stream in West Virginia at the same time as a complete petroleum refinery in Puerto Rico.

They all have this in common: design, engineering and construction by Lummus; the same blend of scientific know-how and technological teamwork that makes ideal installations; maximum return on capital investment.

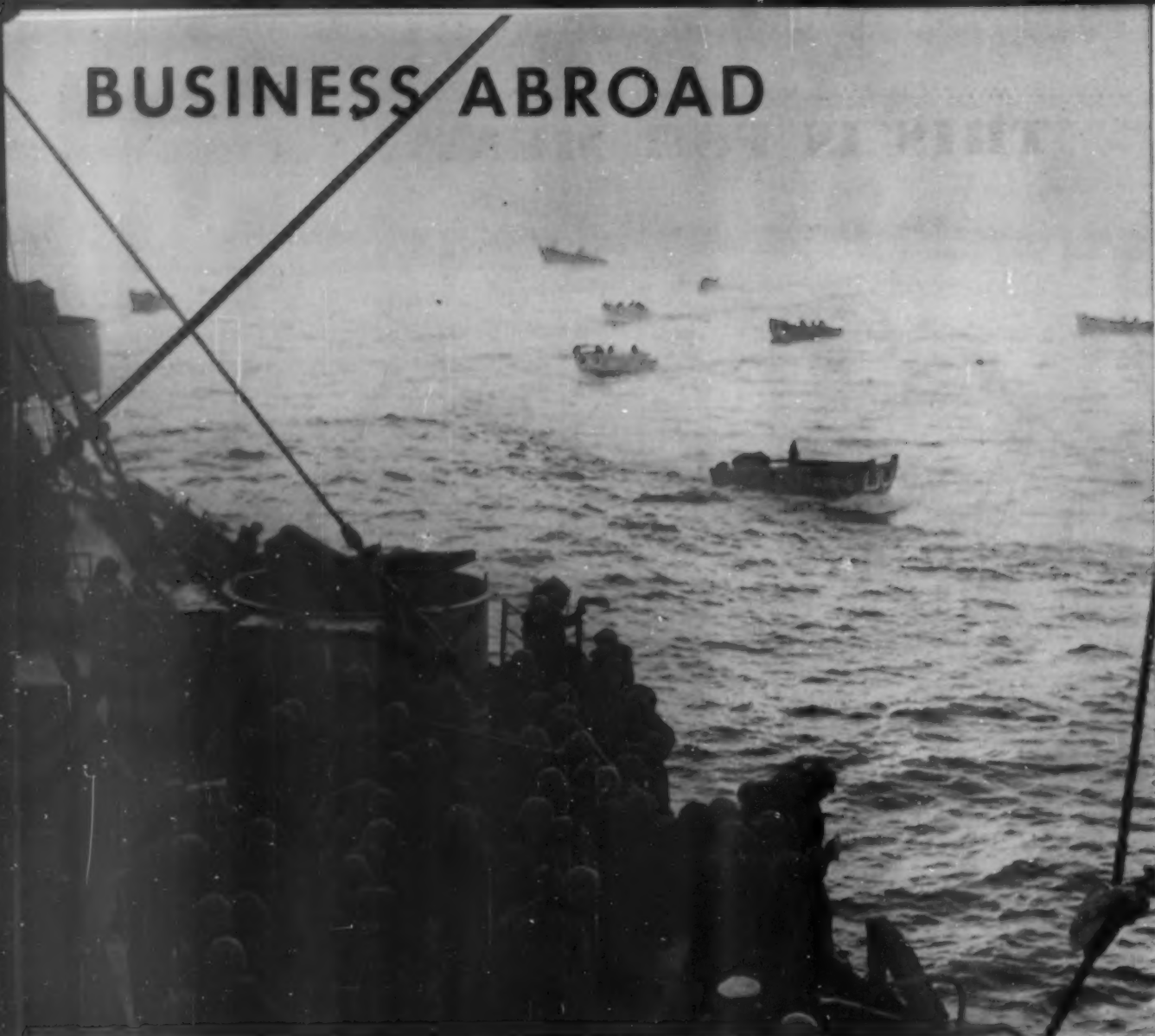
Over 700 such installations all over the world are the Lummus contribution to industrial progress. Lummus engineers can show you the way to dependable and efficient operation on *your* next plant project. We invite you to call or write for detailed information on The Lummus Company.

THE **LUMMUS** COMPANY
DESIGNING ENGINEERS AND CONSTRUCTORS FOR THE PETROLEUM AND CHEMICAL INDUSTRIES

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Engineering and Sales Offices: New York, Houston, Montreal, London, Paris, The Hague, Bombay. Sales Offices: Chicago, Caracas. Heat Exchanger Plant: Monaca, Penna. Fabricated Piping Plant: East Chicago, Ind.



BUSINESS ABROAD



The Atlantic Alliance has ships, planes, pipelines, plans, and men of many nations working together. Born in crisis, a weak NATO has become powerful. Last week, when Germany joined the alliance, brought a turning point.

NATO: Where Do You Go

The history of the 20th Century took a sharp turn last week. The top leaders of the U.S. and Russia agreed to meet for the first time in 10 years. The Russians paraded out a flashy disarmament plan. A free and neutral Austria emerged after 17 years as an occupied country. The Soviet premier announced a pilgrimage of peace to the once-despised Tito of Yugoslavia.

In the same week NATO—the North Atlantic Treaty Organization—rounded

out its formal structure. A powerful, sovereign West Germany became NATO's 15th member. Germany's lusty economic machine, its political influence, and the promise of its arms and men have in fact made NATO into the "position of strength" it was organized to be.

• **Successful Mission**—History can't be read in black and white terms; you can't say definitely that this particular cause brings that effect. Yet it is

not too much to say that a free Austria, and the other manifestations of Soviet reasonableness, are the result of NATO's power.

NATO is more than the physical expression of the Western alliance; it is the Western alliance. It is an idea, a treaty, soldiers of many nationalities working together, files full of plans, a devoted civil service, a network of airfields, pipelines, communications.

NATO's mission has been to be ready



from a Position of Strength?

to defend Western Europe against invasion, and in that way to demonstrate to the Russians that aggression would be too costly. NATO has political purpose as well: to work toward the moment when the West could sit down with the East to negotiate the conflicts of the cold war from a position of superior strength.

Last week, history may well prove, that moment arrived.

• **Questions**—Yet at this time of

NATO's most important achievement, there are some curious, vaguely disturbing questions. Already many Europeans are asking: What kind of future does NATO have? Will it become something very different?

Physical fear of aggression has been the glue that has bound the NATO nations together. What happens to a purely military alliance when the military heat is lessened? And what happens if the Russians—and it is a big

"if"—should offer Germany unification and independence, with loosening of the German ties to NATO as the quid pro quo? Many Europeans feel that Germany's NATO membership and its rearmament could become bargaining material in dickering with the Russians.

• **Price of Peace**—Thus with NATO's new strength could come serious new problems, and real strains on the alliance. If the West hopes for concessions from the Communists, NATO



*this singular
ceiling will **NEVER**
need paint*



*a new concept in roof deck...
from **BORG-WARNER** engineering*

How much will your new building cost . . . after it's up? Will ceiling and roof maintenance dribble dollars down the drain?

Not if you plan ahead for Ingersoll aluminum or porcelain enameled roof deck. The ceiling side of these new modular panels *never* needs paint. *Never* causes maintenance tie-ups. *Never* subtracts a dime from profits. And you have a ceiling that looks beautiful, improves illumination, assures ideal accessory and utility accommodation

The result of intensive research by Borg-Warner's subsidiary, Reflectal Corporation . . . Ingersoll roof deck is amazingly easy to install. Full-floating, it expands or contracts with weather changes, and has high load-bearing capacity.

The aluminum panels reflect radiant heat, cut insulation costs. The porcelain panels are especially corrosion-resistant. Whichever type your new plant needs . . . one thing is sure. Ingersoll roof deck will satisfy you. Borg-Warner's guiding principle . . . "Design it better—make it better" . . . guarantees that.

engineering makes it work **production makes it available**

Almost every American benefits every day from the 185 products made by **BORG-WARNER**



THESE UNITS FORM BORG-WARNER, Executive Offices, Chicago: ATKINS SAW • BORG & BECK • BORG-WARNER INTERNATIONAL • BORG-WARNER, LTD. • BORG-WARNER SERVICE PARTS • CALUMET STEEL • DETROIT GEAR • FRANKLIN STEEL • HYDRA-LINE PRODUCTS • INGERSOLL CONDITIONED AIR • INGERSOLL KALAMAZOO • INGERSOLL PRODUCTS • INGERSOLL STEEL • LONG MANUFACTURING • LONG MANUFACTURING CO., LTD. • MARBON CHEMICAL • MARVEL-SCHUBLER PRODUCTS • MECHANICS UNIVERSAL JOINT • MORSE CHAIN • MORSE CHAIN OF CANADA, LTD. • NORGE • PESCO PRODUCTS • REFLECTAL CORP. • ROCKFORD CLUTCH • SPRING DIVISION WARNER AUTOMOTIVE PARTS • WARNER GEAR • WARNER GEAR CO., LTD. • WAUSAU • WESTON HYDRAULICS, LTD.

will have to maintain its resolve and continue to build strength. If resolve weakens, the price of settlement goes up, and so do the chances of major losses in the cold war. For all the peace talk, there's no assurance that the Communists have decided to call it quits on world conquest.

I. A Team of Nations

NATO has been called the "Great Unknown." A public opinion poll taken two years ago revealed that 79% of Americans, 82% of Britons, 89% of Frenchmen didn't know what "NATO" (or in French, "OTAN") stood for.

• **Born in Crisis**—The NATO idea took shape soon after World War II, as elation of victory began to give way to doubt. Sir Winston Churchill hinted at the idea in his "Iron Curtain" speech at Fulton, Mo., in 1946. In 1947, the Truman Doctrine of containment was, in effect, a declaration of cold war. Throughout the early postwar period, such Atlantic statesmen as Canada's St. Laurent, Britain's Ernest Bevin, Belgium's Spaak, and George Marshall and Arthur Vandenberg of the U.S. picked up and gave currency to the idea of an Atlantic Alliance.

Crisis gave it form and reality: The Communist coup in Czechoslovakia and the Berlin blockade in early 1948 were met by the Brussels Pact, linking Britain, France, and the Benelux countries in a mutual defense plan. On June 11 of that year, the U.S. Senate passed the Vandenberg Resolution, which cleared the way for U.S. participation in a peacetime military alliance in Europe. In April, 1949, the North Atlantic Treaty was signed.

• **Framework of Unity**—The "core" of NATO is Article Five: "The Parties agree that an armed attack against one or more of them in Europe or North America shall be considered an attack against them all; and consequently they agree that, if such an armed attack occurs, each of them . . . will assist the Party or Parties so attacked by taking forth with . . . such action as it deems necessary, including the use of armed force, to restore and maintain the security of the North Atlantic area."

There is a NATO Council in permanent session, with permanent representatives from each member nation. It is served by an international staff, and committees and working groups studying all kinds of problems. NATO has a military organization set up to defend all NATO territories, with a network of commands covering the Atlantic Ocean, and the European continent from the North Cape to North Africa, from the English Channel to the Turkish frontier. This is backed up

Snug fit for a big neck!



PROTECTS AGAINST TORRENTIAL DOWNPOUR

It's the neck of a steel mill roll . . . and one of the toughest assignments in bearing protection. Scale is blasted off the red hot billets with cold water at 1800 psi. But specially designed C/R Oil Seals, with elements of Sirvene (synthetic rubber) never fail in their protection of the vital bearings. C/R won't fail you either, whether your sealing problem is big or little, simple or complex. Chicago Rawhide offers you unequalled oil seal development experience and facilities . . . and a large stock of available types and sizes. You can get acquainted with C/R by writing for your copy of "C/R Perfect Oil Seals."



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More automobiles, farm equipment and industrial machines rely on C/R Oil Seals than on any similar sealing device.

CHICAGO RAWHIDE MANUFACTURING COMPANY

1301 Elston Avenue OIL SEAL DIVISION Chicago 22, Illinois

IN CANADA: MANUFACTURED AND DISTRIBUTED BY SUPER OIL SEAL MFG. CO., LTD., HAMILTON, ONT.

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SIRVENE: (Synthetic rubber) diaphragms, boots, gaskets and similar parts for critical operating conditions • CONFOR: Controlled porosity mechanical leather packings and other sealing products • SIRVIS: Mechanical leather boots, gaskets, packings and related products.



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About International's
Complete Steel
Fabrication Service

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Send me without obligation my personal copy of

- ☐ Steel Fabrication Services Guide
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by a NATO staff defense college, production and logistics groups, economic and financial and statistical offices, civil defense groups.

• **Pulling Together**—The NATO institution is one of history's unique exercises in political organization. And it is highly successful. Fourteen—now 15—nations are involved: The U.S., Canada, Belgium, Britain, Denmark, France, Iceland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Greece, Turkey—and now West Germany. Highly nationalistic nations, each completely sovereign, have been doing these things during peacetime:

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• Setting up joint commands, with power over training, inspection, and deployment of a member's troops.

• Chipping in on the cost of common facilities, from airports to radio.

• Working together on everything from civil defense to aerodynamic research.

That the 14 nations have done this, and often with unanimous agreement, is evidence of the cohesive power of a crisis. It's also testimony that the "Atlantic Community" is more than a phrase.

II. Where NATO Stands

From pathetic weakness in 1950, when the Russians could have rolled to the Rhine within hours, NATO has developed a military force able to slow up an assault so much as to make it hardly worthwhile in an H-Bomb age.

It was the Communist invasion of South Korea in June, 1950, that put the steam behind NATO's military buildup. Later that year, the decision to work for the rearmament of West Germany was taken; in early 1951, Gen. Eisenhower took command.

• **Land and Air**—NATO today reports officially some 90 divisions under Supreme Headquarters Allied Powers in Europe (SHAPE), Gen. Alfred Gruenther, commander. A substantial part of the 90 are at the far end of the Mediterranean, in Greece and Turkey—which joined NATO in 1952. Many others are only skeleton units.

An educated guess puts 15 divisions on the line in Germany, another 15 to 20 behind them in a great arc stretching from the Adriatic to Norway. About 6,000 aircraft, most of them tactical, are operating from 132 Western European fields. Finally, at bases in Britain, Greenland, and North Africa, stands NATO's chief strategic weapon, the U.S. atomic airfleet.

• **Integrating**—NATO is internationalized to the extent that international command stretches down from Gruenther and his staff through area commanders and their air, land, and naval deputies. It doesn't go much further than that; operational units are of a single nationality—down to divisions in some cases, to corps and armies in others.

According to last October's NATO council meeting, there will be changes to build further strength. German and other national forces are going to be integrated with units of other nations to a greater extent. There will be more power over troop deployment in a strengthened NATO. And, most important, NATO last December decided to adopt a defensive strategy based on nuclear weapons. Changes in U.S. atomic legislation have made possible a NATO-U.S. agreement allowing greater exchange of information; that will permit NATO to plan a nuclear strategy.

• **Shield**—NATO can be considered a shield that could contain a Soviet assault until strategic retaliation hit home. With the promise of 12 German divisions, and some 1,500 to 2,000 German aircraft, NATO commanders think that it would be possible to stop a Soviet assault—to fight and even win a limited war in Europe.

III. Hurdles Ahead

The decision to use tactical atomic weapons in NATO's European land defenses, and the arrival of West Germany as a NATO member, point up the problems that now face NATO—and the entire Atlantic Alliance.

• **Atomic Fears**—The political implications of the decision to use atomic cannon as the backbone of NATO defense were enormous in Europe. To most, it meant that the next war in Europe must automatically be an atomic war—and the distinction between strategic nuclear weapons such as retaliating bombers, and tactical weapons such as guns shooting shells with A-bomb warheads, is pretty well lost on them.

Europeans feel that the nuclear weapon has been the real deterrent. If it continues to deter, fine. But if it does not, the result for Europe would be disaster and NATO's forces, however strong, couldn't mitigate the disaster enough to count.

• **Germany and Russia**—This leads some in Europe to begin thinking of peace, at almost any price. And their eyes naturally fall on Germany—and its relationship with the Communist East and Moscow.

There are many Europeans, and their number is growing, who believe the Russians will go to any length to

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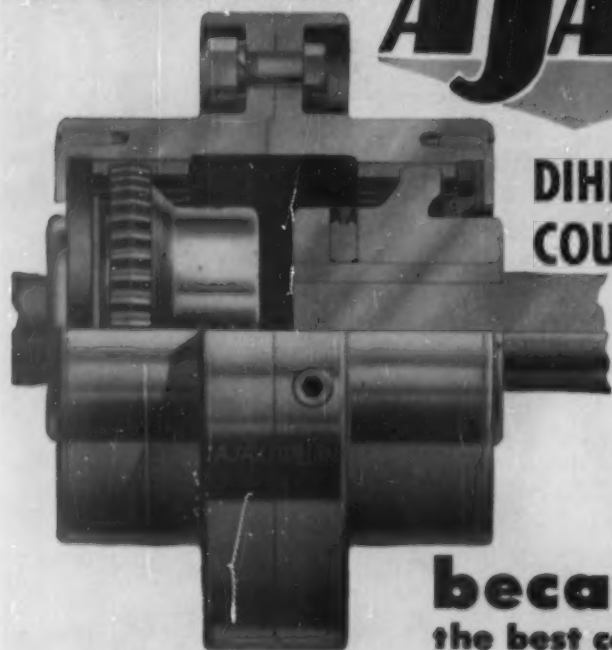
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prevent the rearmament of a powerful West Germany within NATO. Some of them—especially the French—are themselves uncertain about rearming the Germans. The French, and some others, might not be averse to giving up Germany's NATO rearmament in return for the promise of peace.

With this idea in the back of their minds, Europeans are taking a new long look at NATO. What happens to it if the Soviet Union makes a real attempt to create a unified Germany, perhaps not completely disarmed, but outside NATO?

That seems to be the line the Kremlin has decided to push. Foreign Minister Molotov said as much last weekend, that German neutrality is the price of German unification. The West can expect to hear a lot about the "neutrality" plan—Germany as the keystone of a neutral belt stretching from Sweden through Germany and Austria to Yugoslavia.

Certainly Chancellor Adenauer's government and the U.S. won't buy that solution. But carry your speculation a long way, and suppose that Moscow were one day to put the East Europe satellites on the bargaining block: their "neutralization" in return for Germany's. Such an offer would put great strains on the Atlantic Alliance, and the shape of NATO might well change drastically.

There may be other difficult problems for NATO—and especially for the U.S.—even before a German denouement. This year, the U.S. may face a move among European NATO members to cut back their military spending, reduce their arms, and rely on the U.S. nuclear umbrella to protect them.

• **Branching Out**—In a world of H-bomb standoff, many Europeans believe NATO must prepare for a period of military calm by developing attractive non-military functions. These would give added strength to the alliance in dealing with the Communists; NATO would become more of a rallying point for all free nations. It's possible that NATO is so tagged as a purely military show that a new Atlantic organization is needed.

On the other hand, there is growing talk of developing Article Two of the NATO charter, which pledges all members to promote "conditions of stability and wellbeing . . . and to encourage economic collaboration."

IV. For the Long Haul

There is a sturdy foundation to build on.

Politically, the Alliance is run by the North Atlantic Council, made up of foreign ministers and permanent representatives of the members. Smaller na-



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tions now feel the need of more effective political consultation—on a whole range of Atlantic problems.

Norwegian and Canadian members of parliament have taken the lead and plan a get-together in July of men from all the 15 NATO-nation legislatures. There is talk of a "NATO assembly," an Atlantic forum for discussion and coordination of policies.

• **Economics, Too**—Lines of action aren't so clear in the realm of economics. But again, there is a foundation, and custom, to go on. Under NATO, nations have become used to opening their economic and fiscal books in a way unprecedented in history.

Some Europeans feel that the cooperative NATO approach might be used in, say, the area of foreign investment. The long-run wellbeing of the industrialized European nations depends on the development of higher living standards and better markets in Asia and Africa. Intense nationalism in these countries often blocks nation-to-nation capital flow. Maybe the joint approach is necessary if large amounts of capital are to penetrate the walls of Asian suspicion.

• **What Other Base?**—Alternatives to NATO in the economic realm have some defects. The six-nation Coal & Steel Community may be too specialized and too supranational for many NATO members—Britain, the U.S., and Canada, for example. There is increasing discussion of broadening the coal-steel pool to include energy and transport, but all within the six-nation framework.

The Organization for European Economic Cooperation has done considerable work, and has the advantages of including such "neutrals" as Sweden, Switzerland, Austria, and Eire in its membership. But it is not thought of as an "action agency," and the U. S. and Canada have stood mainly on the sidelines. The new Western European Union seems frankly directed at the task of controlling—and limiting—German military strength.

That leaves NATO, and some Europeans hope that the Atlantic idea expressed in it can grow into more than a military alliance. In their view, the military bonds cannot be broken, but they must be supplemented.

• **Moscow Key**—Like everything in the world political arena, NATO's future hinges on what the Soviets are really up to. Most Westerners are aware that the prime aim of Soviet policy is to break Germany away from NATO and the West, and, if possible, break up NATO itself. And the Russians may be settling down for a lengthy campaign.

Where the differences in the Atlantic Community are going to arise is over what kind of NATO is best suited for the long haul.

TATA, which represents enlightened Western

Indians Bid

This week, three officials of Tata Industries, Ltd., one of India's largest industrial empires and the country's principal steel producer, flew into New York. Their mission is to line up some \$66-million to \$77-million for expansion of Tata's Jamshedpur steel mill (picture).

The Tata effort has greater significance than steel expansion, although that is the heart of India's whole industrialization program. Tata, more than any other Indian big business, represents enlightened Western capitalism in India. Unlike many another large Indian company built on "super-moneylending," Tata believes in operating at relatively low-profit margins with volume production. Its general policies, for example toward personnel, are considered "model" in India.

• **Pivot**—The fate of private enterprise in India doesn't hang solely on Tata, but if the company loses its foothold as Indian steel expands, it would be a strong indication of things to come. Already Prime Minister Jawaharlal Nehru has turned India's path toward Socialism of the British Labor Party variety. At the January conference of the ruling Congress Party in Madras, he pushed through a resolution proclaiming Congress' aim as socialism.

However, Nehru has also repeatedly said that his government won't nationalize industry for nationalization's sake, that private capital has a role to play in the country's industrialization, and that foreign capital is welcome. But he made it clear earlier this year



type capitalism to Indians, needs \$77-million from the U.S. for expansion. That's why . . .

for Steel Financing

(BW—Jan. 15 '55, p132), when the Indian government turned down a steel proposal by the far-flung Birla interests, that his government would not underwrite foreign investment in private Indian industry.

Now, Nehru has apparently given his blessing to Tata's mission to the U.S. He even has O.K.'d a \$12-a-ton steel price hike for Tata, something which in the past has held up the company's expansion. Nehru has also hinted that he is prepared to give new assurances to foreign investors.

U.S. and other foreign investors will need those assurances. Since last fall, when American investors—and Washington—were extremely optimistic about the chances of private capital helping Indian development (BW—Nov. 27 '54, p142), events have not been reassuring. One move after another has pushed India closer to state ownership of industry. If Tata is successful in negotiations with private U.S. investors and the Export-Import Bank, it might restore a balance to India's "mixed economy."

• **Needs**—Indian planners say the country will need 6-million tons of steel annually by 1961, the end of the Second Five-Year Plan. Present capacity is about 2-million tons, 65% of it in the Tata works. An additional 3-million tons capacity is to be built in three government plants. One is already being built by the German combine Krupp-DEMAG; the Russians have been awarded a contract to build another (BW—Oct. 2 '54, p159); and a

British mission is now in India negotiating for a third.

Thus Tata's plan to expand its production by 50% is the only possibility of substantial steel expansion by non-government interests in the foreseeable future.

To add another 560,000 tons of capacity to the Tata works will cost about \$200 a ton, or \$110-million, according to American steelmill builders. (That's about \$100 a ton cheaper than U.S. costs.) Rupee expenditures would be from 30% to 40% of that cost for labor and local materials in India. The rest must be raised abroad in dollars or other hard currencies.

• **Banker**—Apparently, Tata's first target for a loan here will be the Export-Import Bank in Washington. A World Bank loan isn't likely because it would require an Indian government guarantee. Also, American equipment manufacturers would prefer an Ex-Im credit for U.S. exports, since that would nose out European bids for machinery. Otherwise, as one U.S. manufacturer put it, "There's no use trying to bid against the Germans."

• **Stakes**—As negotiations commenced, it was a tossup whether the loan would go through. Washington, particularly the State Dept., would like to see something done—if for no other reason than to counter the Russian coup when the Soviets' mill proposal was accepted last fall.

It would dovetail into Washington's plans for Asian economic cooperation, which got only a slight boost from last



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week's Simla Conference (BW-May 14 '55, p164) on Asian regional aid schemes. India, the second cheapest steel producer in the world after Australia, could become the nucleus for heavy industrial development in South Asia.

There's also a propaganda advantage: If U.S.-aided Indian industry succeeds in building steel capacity in India, and New Delhi retains its democratic system of government, the lie would be given to Communist propaganda. The Reds have been plugging away on the theme that only totalitarian methods, Communism, can industrialize Asia.

This line of thinking has penetrated some high places in the present non-Communist Indian government. Recently, Jayprakash Narayan, a prominent Indian Socialist Party leader and a convinced planner, attacked draft proposals for the Second Five-Year Plan as "totalitarian."

Other recent moves that worry Western—and Indian—investors are:

- An amendment to the Indian constitution aimed primarily at land reform. It gives the national legislature the right to nationalize property without recourse to the courts on compensation. It supersedes all present legislation and agreements—even the 30-year non-nationalization guarantees given California-Texas Oil Co. and Standard-Vacuum Oil Co., which have invested more than \$55-million in two new huge refineries.

- Forthcoming legislation amending the present Indian corporation law to abolish the historical system of Indian holding companies, called managing agencies. While most foreign observers agree that the managing agencies have outlived their usefulness, British investment in India may be slowed down by this action.

- The nationalization of the Imperial Bank of India, a move that hasn't encouraged the famous chartered banks, the foundation of British business in India for 300 years.

- Opportunity—Indian observers point out that these recent actions, and Nehru's predilections toward Socialism, don't tell the whole story. Indians have a sense of personal ownership and property that in some ways is close to our own.

Western observers point out that when this spirit of free enterprise gets a chance to operate in India, it does so—forcefully. For example, a small sale of low-interest bonds for Indian subscription to the new \$32-million Cal-Tex refinery on India's East Coast was oversubscribed the first day. It was another proof there is a great deal of "mattress money" that could be lured out.

Some optimists think that Nehru is trying to do that now by encouraging Tata.

Paris Is Shaken, But Hopeful

Bourse slump costs investors \$50-million paper loss . . . Company to spur Latin American investment . . . Free traders win round . . . ICC asks East-West trade.

French investors this week are hoping they have seen the worst of a slump on the Paris stock exchange that wiped out as much as 30% of the value of many listings last week.

Stocks opened sharply higher this week, but last week's decline cost investors about \$50-million in paper value losses.

The break came after five months of fairly steady gains (BW-Feb. 5 '55, p40). Panic was so acute last Thursday and Friday that no quotations were available on some stocks, no buyers could be found.

The drop brought an end to a boom that began in late 1953. It wasn't until then that the Paris Bourse was able to recover from the postwar uncertainty that kept most small investors from putting their money into securities. Stock prices were so abnormally low that within a year many stocks had doubled in value.

Paris' reaction to last week's debacle wasn't overly pessimistic. Over the weekend Premier Edgar Faure and Minister of Finance Pierre Pflimlin pointed out that the country's financial position is fairly firm. The worst long-range effect is likely to be the blow to the confidence of the always ultra-conservative French investor. That's particularly true since it is believed small investors were the worst hit by last week's losses.

- A new finance company to encourage investment in Latin America will shortly be unveiled: Inter-American Capital Corp., with an initial capital of about \$10-million. The company is the outgrowth of a conference on Latin American investment held earlier this year in New Orleans (BW-Mar. 12 '55, p163).

The capital will be raised privately by the sale of income debentures through New York investment houses, and negotiations are under way to have the company's investments managed by the South American Gold & Platinum Co. That firm has had extensive experience in Latin American development, particularly in Colombia, Ecuador, and Paraguay. Rudolf S. Hecht, New Orleans industrialist and one of the sponsors of the spring conference, is the leading candidate for chairman of the board.

The company will seek to provide

capital for the capital-hungry Latin American market. At least in its early stages, the company will limit its investments primarily to manufacturing enterprises.

There is also hope that the company can dovetail its activities into those of the International Finance Corp., which is now being created as an affiliate of the World Bank (BW-Apr. 23 '55, p128).

- Last week the free traders won a small truce—if not a victory—when Pres. Eisenhower sent a Tariff Commission recommendation for a hike in the duty on bicycles (BW-Apr. 23 '55, p128) back to the Commission. The President made no firm decision, just recommended that the Commission restudy the whole question in the light of new statistics and new technological developments in the U.S. industry.

- Another round in the battle of the Japanese sewing machine heads (BW-Oct. 2 '54, p156) has been fought: The Federal Trade Commission has ordered that sewing machines with Japanese heads must be plainly marked. The FCC decision, which provoked considerable controversy, overrules the U.S. Bureau of Customs, which since 1949 has O.K.'d the present markings.

- Some 1,200 businessmen from 42 countries gathered in Tokyo this week for the 15th Congress of the International Chamber of Commerce, pointing up a growing interest in the Orient. More than a hundred U.S. representatives were there. George Sloan, president of Blue Ridge Mutual Fund of New York, a director of U.S. Steel, and a long-time ICC member, was elected new president of the organization.

In its first meetings, American delegates went on record as favoring East-West trade, but not infringement on the current strategic goods embargo, and for U.S. Asian aid "within reasonable limits." And Warren Lee Pierson, TWA president and chief U.S. delegate, warned Asian nations against erecting trade barriers.

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INTERNATIONAL OUTLOOK

BUSINESS WEEK
MAY 21, 1955



A dramatic change in the East-West relations is in the making. That seems to be the view of three of the West's leading statesmen.

On returning from Europe this week, Secy. of State John Foster Dulles spoke of "a turning in the tide of history."

Sir Winston Churchill believes there is "another new look on the Kremlin," that "powerful forces behind the new faces" are working for a change in Soviet policy.

After West Germany joined NATO last week, Chancellor Adenauer envisaged "an era of negotiation," which could finally bring an East-West settlement in Europe.

The Big Four meeting "at the summit," which may come the end of July, will set the stage for a long, complicated process of negotiation.

The heads of state will try to (1) create an atmosphere that will open the way to the kind of diplomatic give and take that has not existed since the cold war began; and (2) fix the subjects for discussion and the procedure for tackling them, whether through the Foreign Ministers of the United Nations and its commissions.

No Western diplomat expects early results from this process, it might take years.

Nobody can predict what the shape of a German settlement, for example, might be. During the negotiations, positions may shift as a result of a change in the relative strength of the two sides.

But you can be sure of this: The West goes into the talks with a position of strength while the Communist world, however strong militarily, is in the midst of a serious economic and political crisis.

You can already see signs of Communist retreat in several directions:

- The Kremlin is now ready to negotiate on Germany despite Molotov's earlier position that Moscow would refuse any such talks if Bonn joined NATO. Moscow is not pushing East German rearmament as it threatened it would. It has just rushed through a Austrian peace treaty—something it had previously refused except as part of a German settlement.

- Premier Bulganin has now admitted that effective international control is the key to disarmament. He suggests that Russia might agree to it if other basic issues between East and West could be compromised.

- For the first time since the Korean War the Kremlin has agreed to a top level conference without insisting on Red China's being there.

There is no proof in all this of a basic shift in Moscow's long-range aims. But there is clear evidence of a new diplomatic flexibility and a willingness to compromise.

Western observers are increasingly convinced that economic weakness behind the Iron Curtain is the clue to the new Soviet tactics.

- The Russian agricultural crisis is turning into a real catastrophe. The "virgin lands" experiment already looks like a big flop (BW—Mar.26'55,p 142). On top of that, the collective farm system is floundering; mass flights from the collectives are taking place in some parts of Russia.

- Soviet industry, too, is in trouble. It is creaking under the weight of armament demands that have been swollen by the atomic race and by Red

INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK
MAY 21, 1955

China's needs. Coal and steel output can't keep up. Shortages of consumer goods make inflation a real problem. State planning is badly out of gear.

This crisis is bound to get worse. So the Kremlin may figure things this way: Let's make a deal with the West before our bargaining position gets too weak.

—•—
Economic conditions in Eastern Europe are as bad as in Russia—or worse.

As a result, Moscow is being forced to look for new ways to keep its grip on the satellites.

This may be one of the chief reasons Kremlin leaders are almost on their knees in trying to get Tito's Yugoslavia back into the Soviet camp.

Next week the top Soviet leaders will visit Belgrade and offer Tito large economic concessions. This is unprecedented. But the Russians figure on (1) preventing opposition movements in the satellites reaching the proportion of Titoism; and (2) getting Tito completely detached from the West.

Tito seems ready to fall in with Moscow's plans. No doubt he will also turn back to a Soviet-type dictatorship.

This would be a real setback for the West. For all practical purposes it would mean the end of the Balkan alliance between Yugoslavia, Greece, and Turkey.

On balance, though, Moscow is the loser in the whole Yugoslav affair. By kowtowing to Tito, the Kremlin will weaken its dominating position in the Communist world. In the end, too, the West can expect to keep the goodwill of the Yugoslav people—something that might upset Tito's calculations.

—•—
Eden's Conservative government seems certain to be returned to office next week. Soon after that, Chancellor Butler will have to make three important decisions:

- (1) How fast to push for convertibility of the pound sterling.
- (2) Whether to introduce tax reforms—including more tax relief—in an autumn budget.
- (3) How tough to be on money policy to guarantee that convertibility will work and that lower taxes don't bring new inflationary pressure.

London financial experts figure that Butler will tighten the credit screw early this summer. If he's satisfied with the way the British economy responds to that, convertibility will follow before long.

Butler made one big step toward convertibility in February. He decided to support unofficial markets for transferable sterling—pounds used in trade everywhere except in the dollar areas.

But there are still big questions. For one thing, convertibility could cost London plenty when trade peaks seasonally. That's why both British Treasury and Bank of England officials favor a flexible rate of exchange for the pound.

If all goes well—if Butler feels Britain's balance of payments is solid by summer—you can expect him to make sterling convertible for current trade and unpeg the pound.

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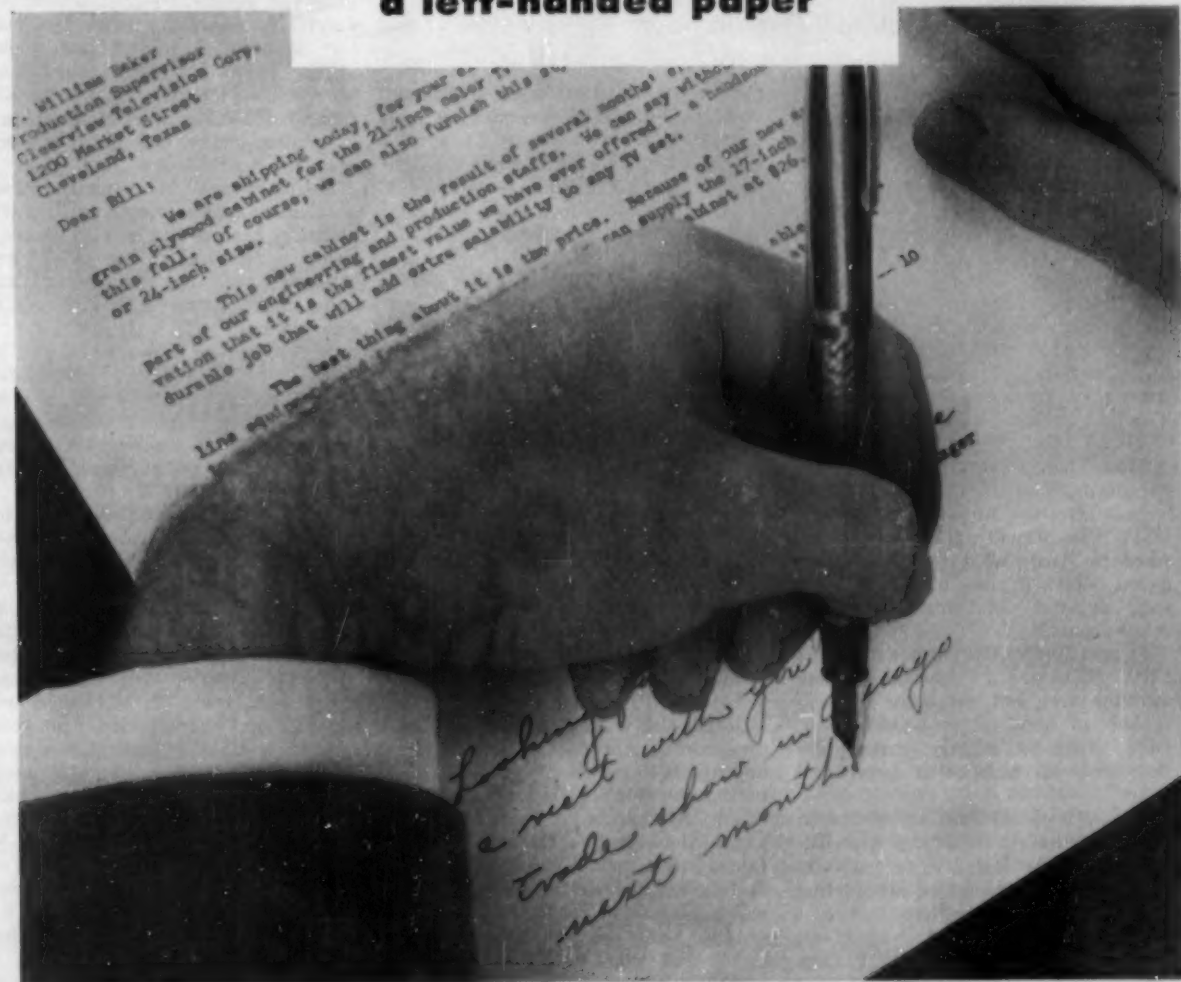
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Rising Wage Cost in Steel

● The industry is resigned to the fact that the United Steelworkers will demand—and get—a pay increase this year. Wage guarantees won't be an issue.

● Last week's wage-policy conference disturbed employers by hints that USW's target is 16¢—or more.

● Even so, industry people believe that the final settlement will be around 12½¢ an hour.

The nation's basic steel producers are reconciled to raises for their 600,000 CIO steelworkers—but they have no intention of “giving away the keys to the mills.”

Their reference is, of course, to wage demands shaped by the United Steelworkers (CIO) at a wage-policy conference in Pittsburgh last week. USW asked, without being specific, for a “substantial increase in pay” this year. The industry has expected that (BW—May 7'55,p160). It was even prepared for a demand topping the 9½¢ to 12¢ settlement “package” of last year. But it got chills from a casual suggestion of what USW's 1955 goal might be.

• **More Than 18½¢**—The word “substantial” can mean anything. At a press conference after the wage-policy meeting, USW Pres. David J. McDonald was asked to clarify what the steel union means when it uses the word in a wage demand. McDonald refused a direct answer.

Pressed further, he pointed out that USW demanded a “substantial” raise in other years, and settled for as much as 16¢ an hour or, in another year, 18½¢. Then he added: “I don't say that such an amount is substantial today.”

Although McDonald could mean that under today's conditions a smaller raise might be accepted as “substantial,” nobody seems to be interpreting it that way. The consensus is that McDonald was saying flatly—but not necessarily finally—that USW's wage demand this June is for a cents-per-hour pay hike of 16¢ or more.

• **Strategy**—Spokesmen for the industry say it's too early to take the high demand figure too seriously. Ask them how hard they are going to fight USW pay demands, and they shrug their shoulders. Any reply is limited to the statement (as meaningless as USW's use of the word “substantial”) about giving away the keys to the mills.

The fact is that while they are reluctant to admit it, steelmen apparently are thinking in terms of a raise this year amounting to as much as \$1 a day. Their feeling is that after going through the motions of bargaining—up from a smaller offer and down from a bigger demand—the final settlement will be around 12½¢ an hour.

• **New Tactics**—However, this year's negotiations will be different from past contract or wage bargaining in one important respect—and the change of tactics has apparent overtones of union politics. For the first time since World War II, heavy steel bargaining will take place simultaneously with six major producers.

In the past, USW consistently concentrated its bargaining strength against U.S. Steel Corp., while other negotiations marked time. Once Big Steel settled, other companies formed a line to the right, pen in hand—albeit not always happy at being held to terms acceptable to the industry's biggest and most prosperous producer.

This year, USW bargaining will open as usual with U.S. Steel in Pittsburgh on June 7, and McDonald has said he expects it to be “a pace setter” once more. But negotiations with Bethlehem Steel Corp., Republic Steel Corp., Jones & Laughlin Steel Corp., Inland Steel Co., and Youngstown Sheet & Tube Co. will not be held up. They will begin a day or so after the opening of Big Steel talks with USW—and, unlike past talks, they will take place in Pittsburgh with McDonald heading each union negotiating committee.

The reason for this, union insiders say, is today's political situation within USW.

• **Union Politics**—Some time ago, McDonald chose Howard Hague, a veteran “front office” official of the union, as vice-president to replace the late James G. Thimmes. Hague was approved by a 22-to-9 vote of the USW

executive board, in one of its first significant splits. He now faces a special referendum election.

A group of union district directors, headed by Joseph Molony, of Buffalo, opposes Hague. Molony threatens to run for the vice-presidency himself, in a first challenge of McDonald's leadership (BW—Mar.12'55,p136).

Molony ordinarily heads the USW committee that bargains with Bethlehem, the industry's second-largest producer. He gets along pretty well with the corporation's leaders, and might, so the union speculation goes, have been able to wangle a little better settlement than Big Steel terms if past bargaining tactics had been followed again this year.

Aware of that, McDonald is taking no chances, union people say; he will be titular head of the Bethlehem negotiating group, and all the others, and bargaining will be simultaneous and under watchful pro-McDonald eyes in Pittsburgh.

• **Wages Only**—When the size of USW's wage goal for 1955 was hinted at in Pittsburgh, some steelmen wondered whether it might not be smart to offer USW a small cash raise and the beginnings of a guaranteed-wage plan—something USW has made a “basic and fundamental objective” for 1956 bargaining. The reasoning is obvious: The ultimate over-all cost might be less.

It now appears that any such idea of offering GAW voluntarily has been discarded. USW, for its part, won't introduce any guarantee demand this year, but in the words of McDonald will negotiate on “wages, period.” Six years ago, when USW's contract was similarly restricted to wage bargaining, USW struck to win pensions, which it then described as “deferred wages.” Conceivably, guaranteed pay could be tied in equally well with hourly pay in USW's eyes. But McDonald reiterated last week that USW isn't “looking for any weasel words in the contract” that would permit GAW bargaining.

More than McDonald's reputation in the steel industry for “reasonableness and responsibility” is involved in this decision to follow the contract to the letter. As in the case of industry people who briefly considered a GAW offer, McDonald recognizes that over a two-year bargaining period more can probably be had by winning a large pay hike this year and following up with a GAW “package” settlement in 1956.

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Taft-Hartley's Key Man

Complaints against employers by unions, against unions by employers, and against both by employees are pouring into field offices of the National Labor Relations Board at a record rate. Under Taft-Hartley, which sweepingly enlarged the definition of an unfair labor practice, each complaint must be studied to determine whether it has sufficient merit for legal action by the board.

The law is very specific in requiring that one man make that key determination. He is the general counsel of NLRB. There is no appeal from his decisions. In some ways he is the most powerful figure in U.S. labor relations.

Today, that man is Theophil C. Kammholz, recent Eisenhower appointee and a new figure in Washington (BW-Mar.19'55,p180).

• **Jumping In**—Kammholz began a career in labor relations as a result of an elbow injury, which kept him out of uniform in World War II. It didn't keep him out of the war effort, though.

While practicing law in Portage, Wis., he was offered a job as counsel in the National War Labor Board's regional office in Chicago.

Kammholz didn't know the first thing about labor relations when he was offered the NWLB job by Nathan Feinsinger, University of Wisconsin law professor then serving on one of his frequent assignments as a labor board official in Washington. Moreover, Kammholz had a lucrative law practice. Nevertheless, Feinsinger today recalls that Kammholz jumped at the offer.

Chicago was a particularly tough spot for NWLB people intent on maintaining labor peace during the war. Kammholz learned the unfamiliar job so quickly and carried it on so well that the Chicago law firm of Pope & Ballard chose him, later, as its legal expert on labor relations. His career was set as a management attorney dealing with labor unions.

• **Catching Up**—Kammholz, 46, was a partner in another Chicago law firm,



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Vedder, Price, Kaufman & Kammholz, when Eisenhower chose him for the general counsel post. A delay in Senate confirmation kept him out of office until five weeks ago. When he moved in, Kammholz found a big job cut out for him.

The general counsel post had then been vacant for three months. Because only the counsel can decide whether to prosecute unfair labor practice charges, complaints under T-H had piled up. Some 500 cases were awaiting his attention. Meanwhile, NLRB processes in his important area were stalled.

By putting in 12-hour to 14-hour days, Kammholz has already handled about 100 of the backlog of complaints. But anxious as he is to clear his desk, the new general counsel is moving cautiously. While a majority of the complaints come under clearly defined T-H rules, many do not. These require decisions interpreting the many complicated provisions of the law; when he rules on any of these, the general counsel is something of a legal administrator whose decisions—from which there is no appeal—make the law.

• **Objections**—Sen. Paul H. Douglas (D-Ill.) referred to this when he voted against the Kammholz confirmation. He described the general counsel under T-H as a combination of "lord chief justice and lord high executioner" with "sweeping and arbitrary" powers.

Sen. Pat McNamara (D-Mich.) joined Douglas in casting the only two votes against the Kammholz confirmation. Both repeatedly emphasized that Kammholz is a man of "character, competence, and integrity," but said that his background as a management attorney should disqualify him.

• **Keeping a Balance**—Kammholz rejects this theory—as the Senate itself did. He notes that the important and perhaps peculiar ability of attorneys to keep "emotion, passion, and prejudice" out of their handling of cases permits them to have both management and union clients. Also, he points out that a labor relations attorney, to be of most value to a client, must have objectivity. "I have frequently had to argue the union side with a firm I have represented," he says.

• **Conflict**—Douglas pinpointed his position during Senate confirmation hearings by asking Kammholz what he would do if a former client becomes involved in a case before the board.

At the time, Kammholz was somewhat vague about whether he could delegate such cases to subordinates, since he has final authority in issuing complaints. He told Douglas that to the extent that he can do this, he will. He still intends to.

• **Union View**—Kammholz's nomination wasn't opposed by the big labor unions. The only labor opposition

raised at Senate hearings came from a Chicago printers' local. The big unions felt, somewhat fatalistically, that a management attorney was sure to get the post anyway. And they knew Kammholz as a management advocate who, while a tough adversary, had been fair.

• **Varied Job**—Complaint cases are the most important and most publicized part of the general counsel's job. They are coming in currently at a rate of 6,220 a year, the highest since Taft-Hartley was adopted in 1947. A high percentage never get beyond the field offices; the rest reach Washington.

Kammholz says "the easy [complaints] have been solved"—because both labor and management have "developed a degree of sophistication." The ones now are complex, he adds.

Making scores of decisions monthly on complicated and controversial issues is only part of the general counsel's job. There are other important duties:

- He's the boss of an 810-member staff, most of NLRB's 1,150.

- Although he is independent of the board itself—and "prosecutes" complaints before it—he is its enforcement officer in prosecuting cases in the courts against those who refuse to comply with NLRB decisions. This sometimes means that the general counsel defends the board in the courts for a decision with which he disagrees—and which is contrary to his original recommendations before the board itself.

- He also handles union representation election cases.

- **Spokesman**—Although it is not statutory, there is still another side to the general counsel job: As the key officer administering the national labor law, he is a sought-after spokesman for T-H and NLRB at many serious management or professional meetings annually.

In public appearances, Kammholz fits the measure of an unimpassioned attorney.

- **Working Together**—There is every likelihood that Kammholz will work smoothly with NLRB—or, at least, its majority. The board now has three Eisenhower-appointed members, and Kammholz is a Republican. He has a good opinion of the law he will administer and terms it "a sound law." Although he is conscious of the power he holds under T-H, he feels NLRB should be the sole judge of T-H policy.

"The general counsel shouldn't make law," he says. "Where cases fall into a twilight zone, I'll send complaints on to the board. The board should speak." Amplifying that, he said he will issue complaints in those cases where there is doubt about an alleged violation of T-H, and thus let the board review the case. To do otherwise—to refuse to issue a complaint—would close out the case, since his decision couldn't be appealed.

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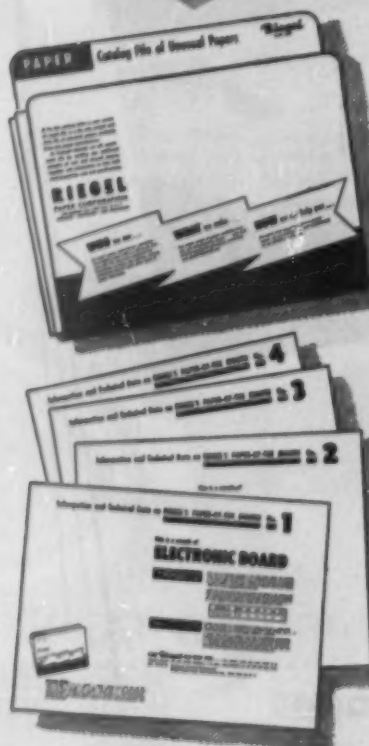
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Crisis Point in GAW Talks

Auto management counteroffers finally come up as bargaining moves into the decisive stage. Meanwhile, glass companies agree to "study" guarantees.

Auto contract talks this week entered the decisive stage. The first management counterproposals to union guaranteed-wage demands were placed before the United Auto Workers (CIO). Every sign pointed to important developments in the offing.

• **Good or Bad?**—All that reporters keeping vigil outside the negotiating rooms could learn, early in the week, was that serious negotiations were under way—unquestionably, the most earnest so far. Representatives of management and union gave the same agreed-on reply to all questions: "No comment."

While the close secrecy of the negotiations irritated those attempting to cover the bargaining on a day-to-day basis—and made speculation even more than normally hazardous—negotiators noted that confining the give-and-take of talks to the conference room was "the responsible way" of negotiating.

Despite the "keep mum" policy, some significant things were apparent at midweek:

• The settlement between Pittsburgh Plate Glass Co. and Libbey-Owens-Ford Glass Co. and CIO's Talss, Ceramic & Silica Sand Workers was regarded as highly significant in auto circles. The companies are main suppliers of glass for auto manufacturers. A GAW demand was an initial issue—but wage demands overshadowed it in the decisive stage of bargaining. The union signed for an 8¢ raise (for some groups 14¢), additional "fringe" benefits, and a one-year joint study of GAW by labor and management—although with no management commitments on GAW.

• GM counterproposals to UAW's guarantee demands were placed on the bargaining table—reportedly calling for some concessions on GAW, including partial acceptance of the principle of guarantees, and a wage offer of at least 6¢ an hour. As an indication that it considers its proposals adequate, GM reassigned to other work members of the special planning group set up to draft GAW proposals to the union.

• Ford told its management that it has taken "no position as yet" on GAW, but that it has "an open mind" on the issue.

• UAW locals in GM and Ford plants were voting overwhelmingly for strike action, if necessary, to back their contract demands. UAW made considerable point of this, to contradict

those who have argued that the GAW issue is unpopular among rank-and-filers. At the same time, the auto union continued to emphasize that a walkout is not inevitable.

• Along that line, UAW leaders outside the Detroit hotspot—notably Richard T. Grosser, auto union vice-president in Toledo—scheduled regional bargaining conferences in an apparent belief that Detroit contracts will shape up about June 1. In Toledo, UAW indicated that Detroit terms including GAW might not be applied rigidly.

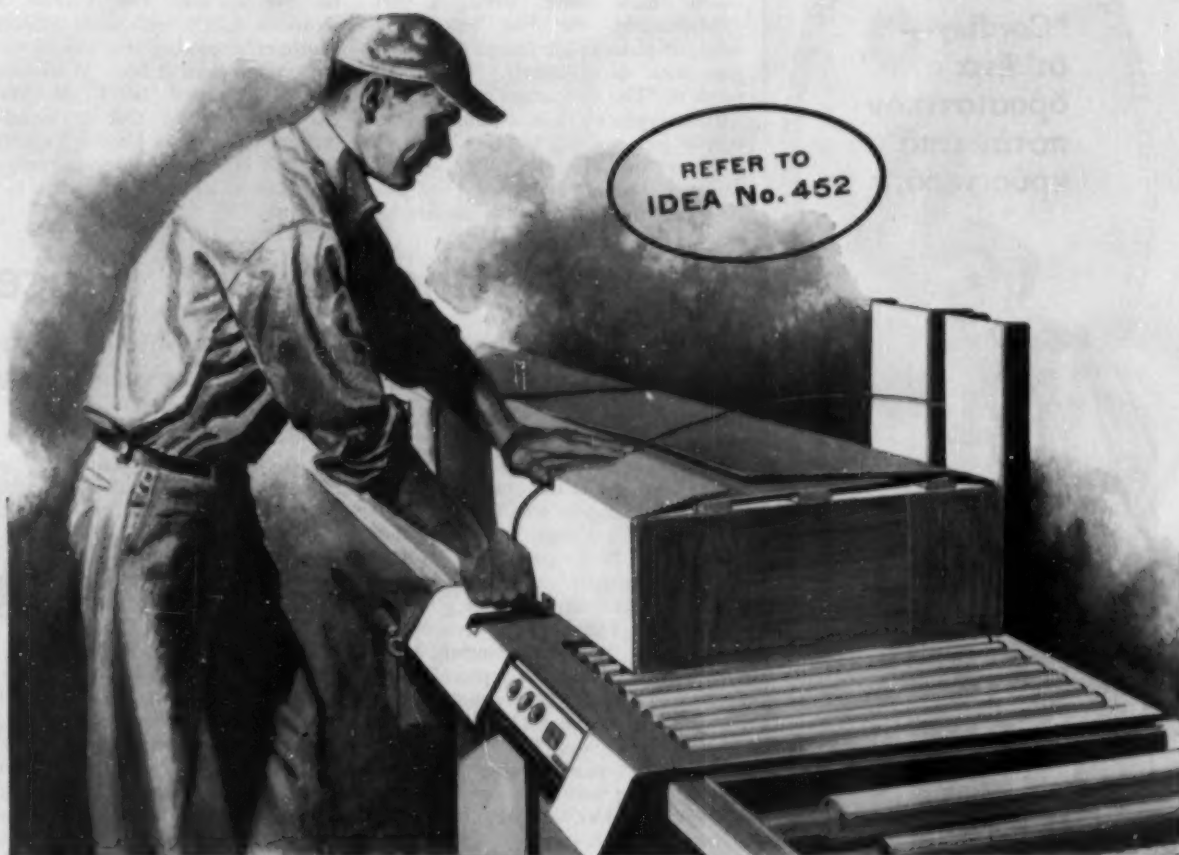


CHIEFS Gorman (AFL) and Helstein (CIO) agree a merger "must come" as . . .

Rival Meat Unions Map Joint Policies

AFL and CIO packinghouse unions have had an on-and-off friendship and policy of collaboration for several years. Between times, like AFL and CIO unions in other jurisdictions, they have been strong rivals, easily estranged during the course of separate wage negotiations. Now, rivalry and split bargaining appear nearing an end.

In the past two weeks, Patrick E. Gorman, secretary-treasurer of AFL's Amalgamated Meat Cutters & Butcher Workmen, and Ralph Helstein, president of CIO's United Packinghouse Workers, have each visited policy-making bodies of the other's union. They predicted that an Amalgamated-UPW merger into a 500,000-member



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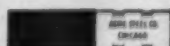
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union "must come" within a year.

Meanwhile, the two unions announced plans to ask companies to bargain with them jointly. They commented: "The companies might just as well, because we'll be consulting constantly and working together anyway."

Many other unions are working similarly toward mergers. Two conventions, just ended, had unification

on the agenda. The United Shoe Workers (CIO) authorized officers to continue "exploring" the way to merger with AFL's Boot & Shoe Workers, and the Brotherhood of Paper Makers (AFL) announced that it is talking merger with CIO's United Paperworkers, and hopes to unite not only the two unions but also all others in the industry.

Disturbing the Building Peace

Local of lathers challenges decision of joint industry-union board in jurisdictional dispute. Fight points up difficulties merged CIO-AFL will face.

Labor leaders are probably better aware than anyone else that the coming AFL-CIO alliance won't end union squabbles. The single house of labor will shake from continued rivalries among its tenants.

If they need any evidence that the merger isn't a cure-all for divided factions, or a new all-powerful union monopoly, it's plainly apparent in a battle now being waged among AFL's construction unions. This fight is endangering the oldest and most successful of union peace-making plans—the joint building industry-union board for settlement of jurisdictional disputes. A setback for the board could mean a new rash of the craft problems—and strikes—that plagued management in past years.

• **Board Takes Over**—For over half a century, AFL construction unions have fought over rights to handle particular work assignments. The disputes often mounted into the hundreds in a single year. When jurisdictional strikes were outlawed by the Taft-Hartley Act in 1947, unions set up the joint board to iron out job assignments among the 19 building unions.

One of the basic rules of the board, headed by Harvard University's John T. Dunlop as impartial chairman, is that all parties to a work dispute will be bound by the decision of the contractor-union board.

This settlement power is currently being challenged by a local of the AFL's Wood, Wire & Metal Lathers. Its officials are asking the National Labor Relations Board to overthrow a board decision against the Lathers.

In any construction board ruling at least one union stands to lose. But the defeated union has almost always acceded to board authority. While jurisdictional disputes continually come up, the settlement process has meant a minimum of strife.

• **Decision Rejected**—But Lathers Local 9 refused, last December, to accept a joint board decision that certain

acoustical ceiling work on the Fairfax County, Va., project of Westinghouse Air Brake Co. should go to Brotherhood of Carpenters. The local and the subcontractor, A. W. Lee Co., had signed an agreement for this work. When Lee gave the job to the Carpenters, at the joint board's order, the Lathers went out on strike.

Lee asked NLRB to seek an injunction against the walkout. The Lathers countered with a demand that NLRB upset the joint board ruling. At injunction hearings in the U.S. District Court in Washington, the Lathers agreed to halt the strike, but pressed the demand for a government review.

This stand by the Lathers, a 15,000-member union, normally might not provoke much concern even though its officers have resigned from the joint board. But the union is being backed in the fight by the powerful AFL Plumbers Union, led by ex-Labor Secy. Martin P. Durkin.

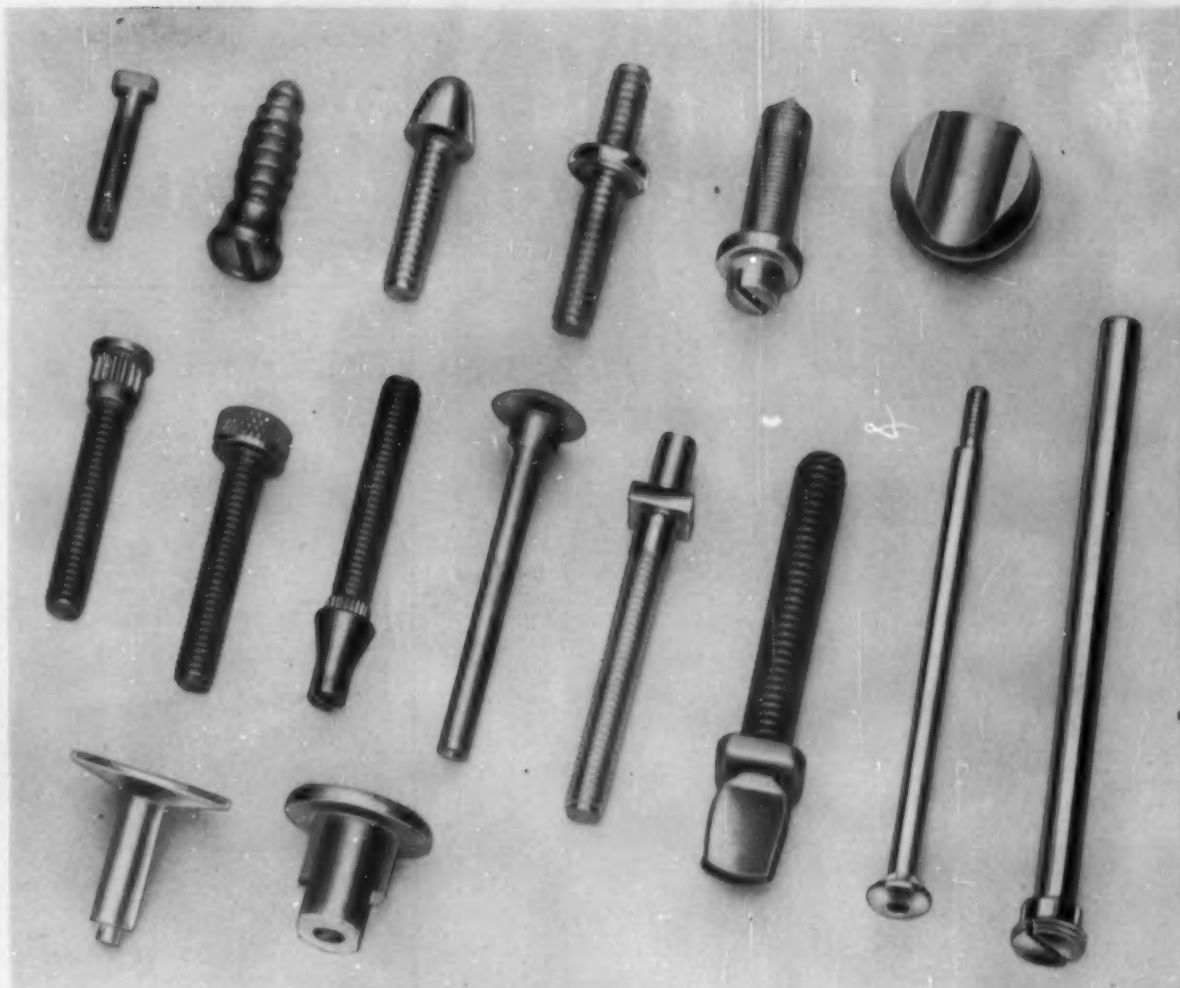
This isn't Durkin's first challenge of the board. Five years ago, in the only other major test of joint board authority, the Plumbers led a similar fight before NLRB—and lost when the agency ruled that the joint board's authority was controlling on the parties bound by an agreement.

• **Presidents Vote**—Recently, building trades presidents held a secret meeting on the issue and voted 16 to 2 against the Lathers—and Durkin. But at the time, the Plumbers' chief argued that jurisdiction should be settled by contract between employer and union, as well as through the joint board.

To this argument, Dunlop's board counters that such a system would mean only union strife.

To have the NLRB make its own decision on whether the Lathers or Carpenters should do the acoustical ceiling work, the joint board said, would "encourage violation of the joint board agreement and gradually weaken, if not destroy, the board."

NLRB members who, without the



This picture represents . . .
\$140,000.00 saved for manufacturers by HARPER

By cold heading these parts, Harper has been able to save manufacturers over \$140,000.00 from what they would cost if they were milled from bar.

For a third of a century Harper engineers have been devising new and better methods of cold heading. For nearly a third of a century, they have been solving problems having to do with the production of special parts in quantity at low expense by the cold heading method.

If you are today milling small parts, there is a good likelihood that The H. M. Harper Company can show you how you can save money—perhaps lots of money!

Harper specializes in fastenings of non-ferrous metals, stainless steels and high temperature alloys. If you require parts in any of these metals, standard or special, call on Harper.

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joint board, would have to rule on assignments of complex construction jobs, have expressed relieved satisfaction at its efforts.

• **Lathers' Position**—In making this new test case, Lathers Local 9 raises a number of arguments for the NLRB to consider and a ruling is probably several months away.

The contractor has refused to take sides in the dispute.

LABOR BRIEFS

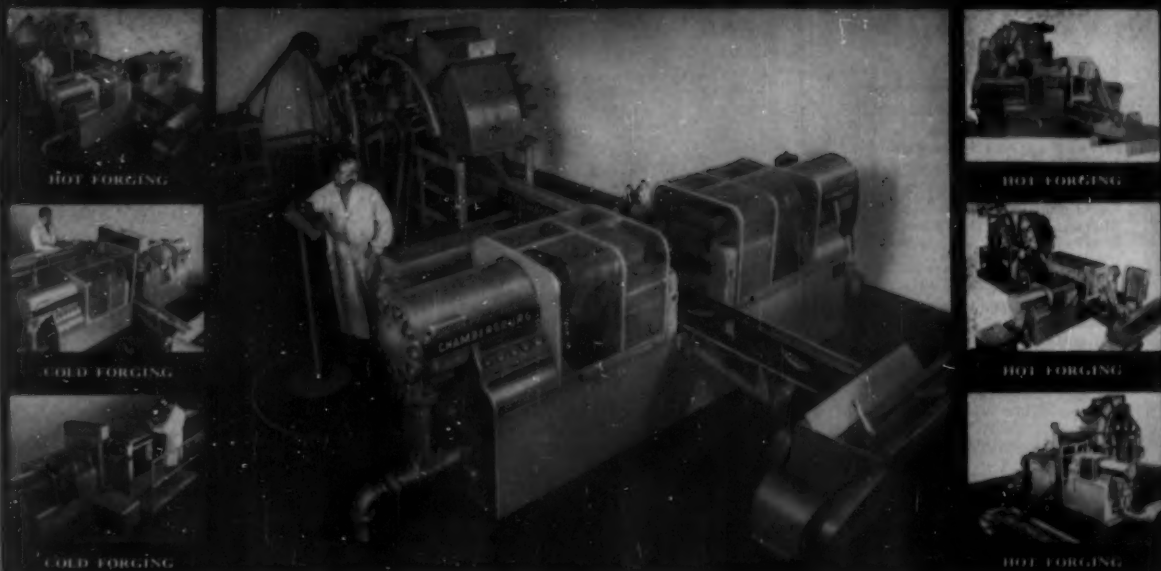


Retired miners picketed a Duquesne Light Co. power station in Pittsburgh (picture) in a unique protest against use of some nonunion coal, included in a shipment from Spear Coal Co., Duquesne supplier. The pickets—all "well over 60"—said that use of nonunion coal (on which no 40¢-a-ton royalty is paid into the miners' welfare fund) endangers their pensions.

Three-week shutdowns are due to spread in industry this summer as a result of the new vacation clause in many labor contracts, giving three weeks' paid vacations to high-seniority workers. Among others, ALCO Products, Inc., in Schenectady, last week announced that it would close for the longer period this year because of an "imbalance" caused by many key personnel off for three weeks.

Shorter work weeks were announced last week as bargaining goals of the Brotherhood of Paper Makers (AFL), which will seek a 32-hour week this year, and of the United Packinghouse Workers (CIO), which will try for a 30-hour week at 40 hours' pay in 1956. Both want the federal pension age set at 60.

automation in the forge shop is now an accomplished fact



The Cecomatic Process, based on the Chambersburg Impacter, unites all forge shop operations, from stock lengths to completed forging into one continuous automatic operation. There is no shock or vibration, as

the Impacter forges by means of horizontally opposed rams striking the forging stock simultaneously from both sides. Automatic heating, feed and handling devices are incorporated and the completed

forgings may be carried to the next step in the production line without interruption. Forgings of a few ounces to those weighing hundreds of pounds may be produced.

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Chambersburg Pennsylvania

FORGING IN MID-AIR



THE IMPACTER

BASIC TOOL OF THE

CECOMATIC PROCESS

IN N. Y. C. SEPT. 20-22
KINGSBRIDGE ARMORY



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A "decade of progress" in packaging and materials handling. Equipment—materials—techniques.

Competition—National Championship awards for technological improvements in packing and handling.

Short Course—Outstanding technical program offered in cooperation with New York University.

Society of Industrial Packaging and Materials Handling Engineers—111 W. Jackson—Chicago 4, Illinois.

PLYMOUTH *Chrysler Corporation* DE SOTO CHRYSLER

YOU GET THE GOOD THINGS FROM CHRYSLER CORPORATION

DIVIDEND ON COMMON STOCK

The Directors of Chrysler Corporation have declared a dividend of seventy-five cents (\$0.75) per share on the outstanding common stock, payable June 11, 1955 to stockholders of record at the close of business May 16, 1955.

NICHOLAS KELLEY, Jr.,
Secretary

"KE-CABINET" KEEPS KEYS SAFE, HANDY

• Units available in 8 sizes holding from 10 to 400 keys. Each key has its own KE-TAG of durable, valenium five. For further information write: Cushman & Denison Mfg. Co., Dept. B-W, 153 West 23rd St., New York 11, N. Y.

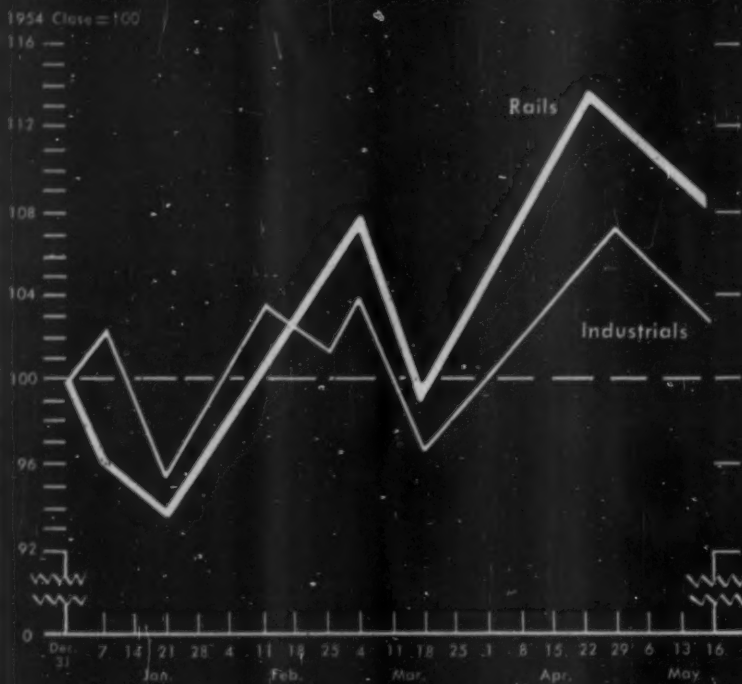


WHEN BUSINESS MEN
WANT BUSINESS NEWS
THEY TURN
TO.....



THE MARKETS

1955's Temperamental Market



Data: Standard & Poor's Daily Stock Indexes, New York Stock Exchange.

BUSINESS WEEK

The Bull Gets Weary

The chart above could be titled "Portrait of a Tired Bull." By midweek, Standard & Poor's daily average of 50 industrials had ploddingly retraced its steps to the point where it stood last Jan. 3, after shifting about in a 40-point range between 395.1 on Apr. 26 and a low of 355.2 on Jan. 17. The daily rail average had held up a little better—at midweek it stood at 100.2, about 7.5% above the Jan. 3 mark.

The hesitancy and caution reflected in the averages shows up in trading volume, too. In the week ended May 13, average daily volume on the New York Stock Exchange shrank to 2.2-million shares, the lowest since the last week in October, 1954. And while slumping averages have usually coincided of late with lower volume, it must be noted that the two recent rallies—if they can be called that—were attended by less volume than on the day that preceded them. Thus last Friday's rally, which boosted the 50 industrials from 382.8 to 385.5, had the lowest daily volume since Nov. 1,

1954, with only 1,860,000 shares traded on the Big Board.

• **Calming**—Mostly, Wall Street feels that market action in the last month or so has been beneficial. Less trading and fewer pyrotechnics in individual issues have marked the end of the speculation that had the market yawning wildly not so long ago. The Federal Reserve has to get some of the credit for this; its latest boost in the margin requirement to 70% seems to be taking some effect, though the Street ignored it at first.

Then again, those darlings of the speculators, the aircraft shares, have been socked with the one-two punch of renegotiation and lower earnings. And the wave of merger rumors, followed by spates of buying, has subsided. A rumor now would probably bring only a weary shrug from the same traders who a few weeks ago skyrocketed issues such as Warren Foundry & Pipe and Bath Iron Works.

• **Peace**—The breath of peace in the air is another strong factor in the market (page 27). Investors and traders

are reviewing their positions in the light of possible international changes, hinted by Secy. of State Dulles' expressed optimism, and the signing of the Austrian peace treaty.

Peace, of course, would be a bullish factor in the long run, despite the weakening of the aircrafts and other defense stocks that has followed reports that tension is easing. It's rare for a bull market to last long in wartime.

Recent Losers: Aircrafts Aren't Lonesome

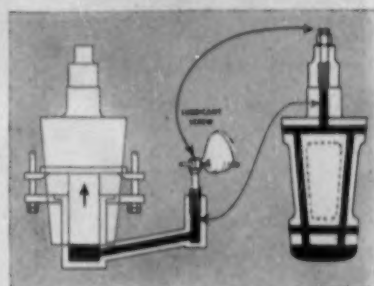
As the 1955 bull market continues its recent dyspeptic course, the list of stocks below their highs for the year, and, indeed, below their 1954 year-end prices is growing. And, while the aircrafts as a group have been heavy

losers, other groups are well represented in the minus column. Even the building suppliers and steel groups, both of which have been strong points in the business revival, show soft spots, as this sampling indicates.

	1954 close	1955 high	Price this week	This week vs. 1954 close	1955 high
Aircraft manufacturing					
Boeing Airplane.....	\$73.87	\$88.50	\$56.37	-23.7%	-36.3%
Douglas Aircraft.....	86.67*	94.00	67.75	-27.6	-33.2
General Dynamics.....	80.37	80.00	55.25	-31.3	-30.9
Grumman Aircraft.....	38.00	45.75	32.87	-13.5	-28.2
Republic Aircraft.....	40.25	44.25	31.00	-23.0	-36.0
Rohr Aircraft.....	28.12	35.00	22.50	-20.0	-35.7
Solar Aircraft.....	21.75	27.62	20.62	-5.2	-25.3
Automotive					
Bendix Aviation.....	52.37*	59.50	48.37	-7.6	-18.7
Chrysler Corp.....	71.12	82.87	73.62	+3.5	-11.2
General Motors.....	97.87	107.37	93.50	-4.5	-12.9
Thompson Products.....	55.75	60.50	48.25	-13.5	-20.2
Building supplies					
Flintkote.....	40.87	46.50	40.25	-1.5	-13.4
Johns-Manville.....	88.25	97.00	84.00	-4.8	-13.4
Lone Star Cement.....	58.25	65.75	56.50	-3.0	-14.1
National Gypsum.....	48.75	55.75	46.25	-5.1	-17.0
Rulheuid.....	48.00	48.75	40.25	-16.2	-17.4
Sherwin-Williams.....	104.75	117.50	101.00	-3.6	-14.0
Metals					
Aluminum, Ltd.....	77.75	96.25	85.37	+9.8	-11.3
Bethlehem Steel.....	109.12	147.87	126.62	+16.0	-14.4
Homestake Mining.....	47.75	48.00	39.75	-16.8	-17.2
Kaiser Aluminum & Chem.....	59.75	88.50	76.00	+27.2	-14.1
Kennecott Copper.....	105.50	113.87	102.50	-2.9	-10.0
National Steel.....	65.50	72.75	64.75	-1.2	-11.0
Phelps Dodge.....	52.25	57.87	50.75	-2.9	-12.3
Warren Foundry & Pipe.....	51.00	62.75	47.50	-6.9	-24.3
Wheeling Steel.....	53.75	58.87	51.25	-4.7	-12.9
Youngstown Sheet & Tube.....	79.87	84.50	71.50	-10.5	-15.4
Oils					
Amerasia Petroleum.....	227.50	230.50	193.00	-15.2	-16.3
Atlantic Refining.....	39.25	40.25	34.87	-11.2	-13.4
Shell Oil.....	61.75	66.50	59.00	-4.5	-11.3
Standard Oil (Ind.).....	48.12	49.50	43.50	-9.6	-12.1
Union Oil (Calif.).....	57.62	59.00	50.00	-13.2	-15.3
Miscellaneous					
American Can.....	44.75	44.75	38.25	-14.5	-14.5
Columbia Broadcasting "A".....	85.50	98.00	83.50	-2.3	-14.3
Remington Rand.....	33.50	48.62	40.37	+20.5	-16.3
Trans World Airlines.....	31.25	33.50	28.00	-10.4	-16.4
United Air Lines.....	41.37	48.37	42.00	+1.5	-13.2
Ward Baking.....	24.25	24.75	17.12	-29.4	-30.8
Westinghouse Electric.....	80.37	83.25	68.87	-14.3	-17.3
F. W. Woolworth.....	50.00	52.62	46.12	-7.8	-12.4
Worthington Corp.....	51.75	59.50	52.00	+0.5	-12.6

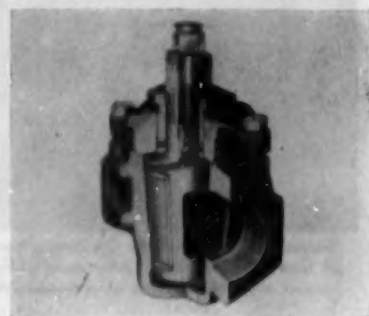
* Adjusted for stock split.

COST CUTTING

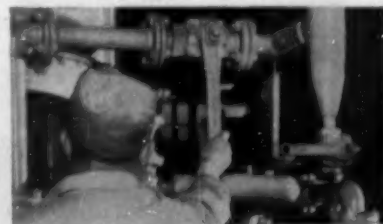


Pressurized Lubrication: KEY TO VALVE ECONOMY

The drawing above shows an example of Pascal's Law (circa 1650) . . . "Pressure applied to a confined fluid is transmitted uniformly to all areas of the confined surface . . ." The Rockwell-Nordstrom lubricated plug valve is designed around this basic principle. Lubricant under pressure forms a remarkably leakproof seal, dependable as Pascal's Law itself.



The Rockwell-Nordstrom lubricated plug valve is being widely used in industry today both because it is so dependably leakproof, and because lubrication eliminates metal-to-metal friction, the major source of costly wear. Quarter turn closure simplifies hand or power operation.



Cost records prove that Rockwell-Nordstrom valves cut costs by reducing down time, repair and replacement expense. An added advantage: they cost no more to buy (sometimes less) than ordinary valves. Rockwell Manufacturing Company, Dept. I-E, Pittsburgh 8, Pa.



One reason Westinghouse Air Conditioning lasts longer, and needs less maintenance, is the refrigerant leak-test, shown above. After manufacture and assembly, every part is thoroughly tested for tightness with a Halide Torch, which changes color at the least trace of escaping gas. The result . . .

12 Years of Top Capacity AIR CONDITIONING with unbelievably little maintenance

In 1942, RKO installed a Westinghouse Air Conditioning system in its RKO-Fordham Theater, New York. Since then the installation has provided uninterrupted comfort for millions of RKO customers. Even with its work-load increased by wilting summer crowds, the system has operated regularly, seven days a week, May through October, with unbelievably little maintenance.

And the two Westinghouse compressors that make up the heart of the system have never had a breakdown, never been overhauled, never been repaired. With lubricant sealed in,

dirt sealed out, these Westinghouse compressors operate today as efficiently as when they were installed 12 years ago.

BUSINESSMAN'S GUIDE TO AIR CONDITIONING...Yours for the Asking

To help you get your full dollar's value of air conditioning, we've prepared a 12-page guide. It even discusses costs. To get your free copy, call your local Westinghouse Air Conditioning distributor. He's listed in the Yellow Pages of the phone book. Or write:

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Box 510, Staunton, Virginia

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J-90480

Wall St. Talks . . .

... about margin traders' refusal to scare . . . a yen for tax exemptions . . . rumored petroleum-chemical marriage.

The Fed can't scare the margin traders. In the face of a second boost in margin requirements, the borrowings of Big Board members jumped to \$2,223-million at the end of April, up from \$2,105-million in a month. That's money used mainly to finance customers' margin accounts. In the same period, customers' net debit balances jumped \$52-million, to \$2,752-million; their free credit balances dropped \$49-million, to \$973-million.

Interest in 10-year maturities is growing, municipal bond traders say. Some attribute this to temporary switching of cautious money out of equities into tax exemptions until stock market uncertainties are cleared up.

Latest Wall Street rumor is that a merger will soon be announced by Phillips Petroleum Co., big natural gas and petrochemical producer, and Olin Mathieson Chemical Corp., fifth largest unit in the chemical field.

Market letter gleanings: There is "no need for haste in making important purchases. Time probably favors the buyer." (A. M. Kidder & Co.) . . . Today's "lessened enthusiasm" is "tending to improve the health of the stock market and extend the duration of the rise." (W. E. Hutton & Co.)

Off-board offerings of oil stocks, numerous and large of late, have alerted some smart Streeters. They wonder if this means that the investment trusts may soon start some real unloading of oil shares, long their top holding.

Wall Street's Vickers Bros. has made some corrections in its earlier list (BW—Apr.2'55,p117) of the investment trusts' "favorite 50" common holdings as of Dec. 31, 1954. Holdings of Texas Co. (which ranked third) totaled 950,000 shares, not 750,000. Goodyear Tire & Rubber Co. common, left off the original list, also actually ranked 16th; some 841,000 shares, 94% of all issued and valued at \$45.5-million, were then held by 40 trusts.

A hedge? Wall Street hears New York's Chase-Manhattan Bank, recent victim of several branch holdups (BW—Apr.16'55,p27) has renewed its option on the air-wave serial "The Adventures of Sherlock Holmes."

Chemistry takes a new look at Mirrors



The manufacture of glass mirrors is an old art, dating back more than 2,000 years, but this fact is a challenge rather than a bar to further technical advances.

Mirror manufacturers long have recognized

Ask Merck how its Research Program can help you

During recent years, manufacturers in numerous fields have discovered that whenever they face a problem involving chemistry, an excellent starting point is to consult Merck. Perhaps the results of the Merck research program and the skills and experience of the Merck organization can be helpful to you. Please address: Director, Scientific Administration, Merck & Co., Inc., Dept. B-5.

the need for improving the durability of the silver coating on mirrors, and recently the Merck technical staff helped them solve this problem. As a result of tests initiated in the Merck Laboratories, it was found that by using hydrazine tartrate as a reducing agent, metallic copper can be deposited directly on the silver. This new procedure materially increases both the adhesiveness and durability of the reflecting surface.

Serving industry by sharing chemical developments is a major Merck activity. Regardless of what you manufacture, Merck discoveries may offer you a means of bringing your customers new products or better products, or reducing production costs.

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MERCK & CO., INC.

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Here is a hook for a hoist—mankind's sinew-sparing servant . . . as industrially indispensable as its load-lifting applications are limitless.

Hoists lift steel beams for buildings and bridges, raise and lower drills and casing for deep-driven oil wells, lift a bucket of cold water from a country well or a ladle of molten metal in a mill . . . lighten load-lifting chores for machinists and miners, loggers and longshoremen, farmers and factory workers.

HOW MANY KINDS?...

Consider the many kinds of hoists in use today . . . reeved with rope, cable, chain . . . powered pneumatically, manually, electrically . . . engineered with gears, pulleys, pistons, ratchets.

Think how many millions of plans, sketches, models and mock-ups have contributed to their evolution. The eyes of a myriad of inventors, engineers and draftsmen have appraised them. The hands of countless pattern makers, tool and die makers, machinists and other craftsmen have shaped them.

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As mechanization has supplanted animal power on the farm, the past half-century has witnessed the growth of agricultural America to the world's most productive and prosperous farming nation.

Kelsey-Hayes is proud of the role it's played in this progress. Since 1888, our French & Hecht Farm Implement Division at Davenport, Iowa has been solely devoted to the making of wheels and vital parts for the machinery and implements of agriculture. *Kelsey-Hayes Wheel Co., Detroit 32, Mich.*

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Wheels, Brakes, Brake Drums, Special Parts for all Industry

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PERSONAL BUSINESS

BUSINESS WEEK

MAY 21, 1955



Some day you may be called upon to testify as a witness at a trial or a hearing. Don't try to get out of it because the prospect may be harrowing, unpleasant, or inconvenient.

For one thing, a witness who has vital information can contribute immeasurably to the interests of justice. For another, if one side or the other thinks you have information, you can be forced to testify.

And failure to answer a subpoena means that you can be adjudged of contempt of court and hit with a severe penalty.

The experience doesn't have to be unpleasant if the witness understands the procedure. The proper attitude on the stand will gain for the witness the respect and admiration of all concerned.

The main guide to behavior is basically simple common sense. The witness who is respectful and courteous, sincere and honest, is not only rendering a valuable public service—he is doing so with a minimum of grief to himself. These rules will help you achieve that:

- Never think you can outsmart the questioner, nor assume that you know more than the judge or the lawyers. You can't and you don't.
- Don't try to figure out what the lawyer is driving at each time he asks a question.
- Avoid trying to anticipate what the next question will be.
- Wait for the questions—don't try to tell your whole story in one mouthful.
- Don't worry about the effect that each answer will have on the outcome of the case.

Remember this: The weight given to your testimony by the jury, or by the judge if there is no jury, depends in large measure on your appearance, attitude, and the way in which you answer questions.

Answers should thus be frank, straightforward, and responsive. They should be based on facts—your own knowledge of what you have actually seen or heard—not hearsay or opinion. Don't try to answer until the question has been fully asked. Also, give the attorney for the other side a chance to object before you do answer. If you don't understand the question, say so and ask for clarification.

What makes witnesses most nervous is the prospect of cross-examination. The honest witness of good character should not worry about it. But he must recognize that the purpose of it is to shake his story, so that it will be less harmful or damaging to the side the cross-examiner represents.

Thus you can expect an attempt to create doubts as to the accuracy of your story. The lawyer may try to convince you that maybe you aren't so positive as you claim you are about what you saw or heard. Or he might take the tack that your vantage point was too limited to give an accurate picture of what happened.

It can go further and get rougher. There may be attempts to discredit you as a witness, to raise doubts as to your credibility by trying to show that you are prejudiced, biased, or interested in the outcome of the case, or even to show that you are depraved in character.

Unless you have something to hide, you need not fear these attempts.

The main thing is not to let it get under your skin. Keep your dignity;

PERSONAL BUSINESS (Continued)

BUSINESS WEEK
MAY 21, 1955

don't lose your temper or try to be a smart aleck. This is just what the cross-examiner wants—because it knocks the effectiveness from your testimony.

The judge will protect a witness from questions that do not fall within the scope of proper examination. This means questions that are designed merely to annoy, harass, ridicule, or humiliate the witness, or that constitute an invasion of his constitutional protection from self-incrimination.

Don't be concerned if the testimony of other witnesses differs from yours—it doesn't mean that either yours or theirs is necessarily false. Sincere and honest people often give different versions of what occurred—even though they have witnessed the same incident at the same time.

—•—

It's time kids started looking for jobs if they want to work this summer. Summer jobs are more plentiful this year, but the competition is keen—in some fields jobs have already been filled.

Here—generally—is where you'll find jobs open:

- Camp counselors. Minimum age of 18, one semester of college, and some group leadership experience (such as scouts) are usually required.
- Farm cadets. This is hard, outdoor work for boys, paying \$50 a month, room and board. Applicants must be at least 15 years old.
- Typists and stenographers. Girls with typing and/or stenographic skills are in demand throughout the summer to fill in during regular staff vacations.

It's hard for anyone under 16 to get a summer job. Best leads come from personal contacts, such as family and friends—for jobs such as lawn-mowing, baby sitting, and the like.

(Important: Any child under 18 must have a working permit from the local Board of Education to hold a regular summer job.)

Best source for jobs both locally and out-of-town is U. S. Employment Service. Kids should not be discouraged if they can't find the job they want right away. Many openings for summer employment come in as late as July.

—•—

Manners and modes: A convenience for the school of dry-Martini drinkers who like them very dry is an atomizer to spray vermouth in a fine mist. . . . Ken-L Products is making dog biscuits in six different colors and shapes. They look better to dog owners than to their pets. . . . Tote-to-Boat Co. makes a collapsible aluminum and canvas boat that holds three people and their gear.

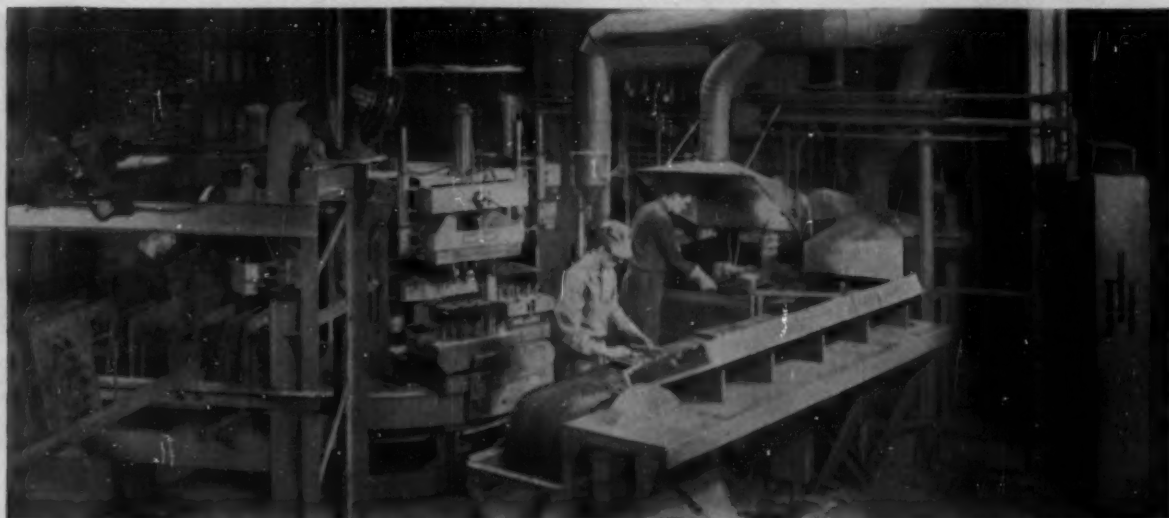
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People often miss a good bon-voyage party because they don't get to the ship on time. Be sure to get on board at least one hour before sailing time; visitors aren't allowed on transatlantic liners later than this.

They will be requested to leave about a half-hour before the ship's scheduled departure. Earliest boarding time: three hours before sailing.

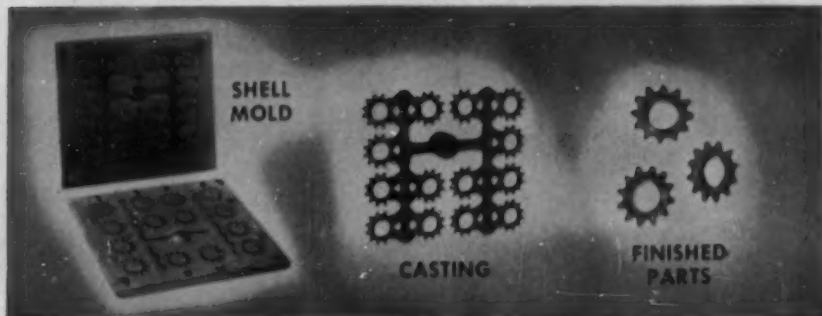
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Note for fishermen: Just out is *The Complete Book of Fishing Tackle*, by Larry Koller (Bobbs-Merrill; \$2.75), which contains information on all new gear, including what the author considers the best gadgets.

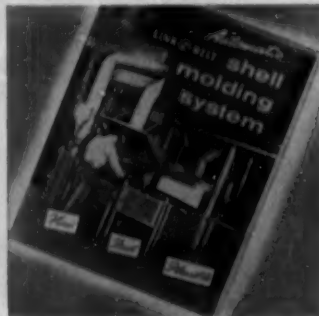


THE LINK-BELT SHELL MOLDING SYSTEM has been proved in service, and can be operated by relatively unskilled labor. Thin molds of resin-bonded sand are made at the molding machine (right background). Cores are inserted in the lower half of

mold on the belt conveyor (foreground). Mold halves are joined in the closing machine (center). Finished molds ready for pouring are removed from closing machine and placed in storage conveyor (left foreground).



THIS IS SHELL MOLDING. Clean, smoothly-joined shell molds reduce finishing costs, assure high-volume output of sound, top-quality castings—even those of intricate, thin-sectioned design.



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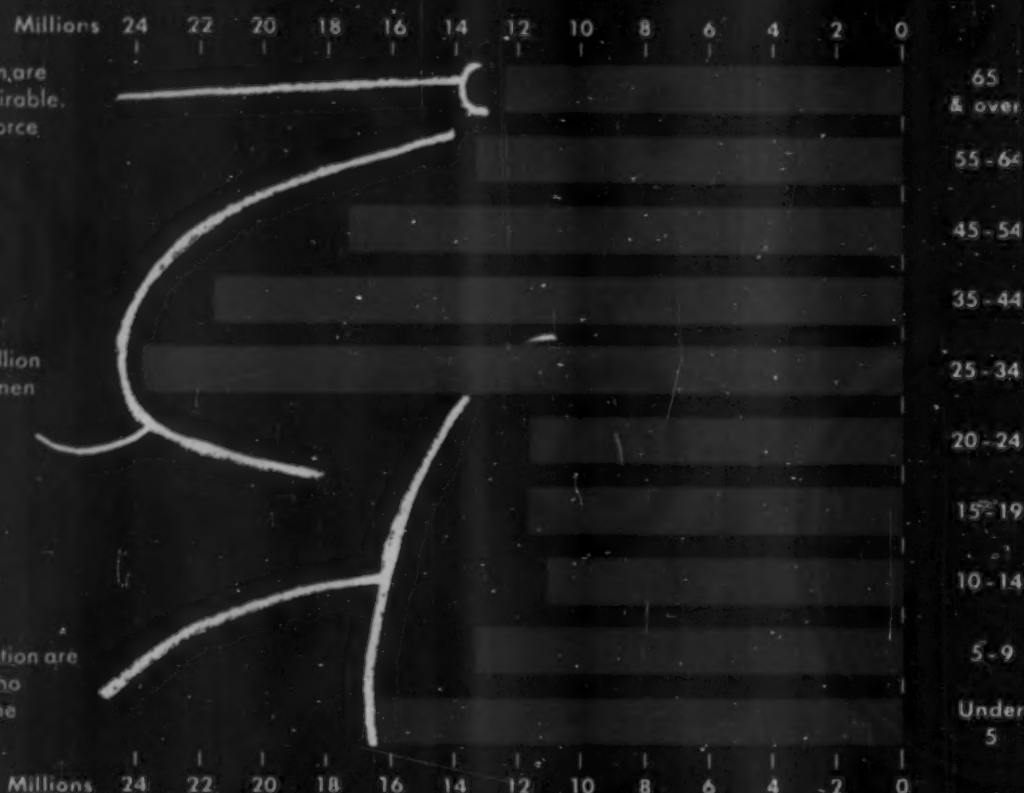
1950

Distribution by age according to 1950 census

About 8% of the population are 65 and over—retired or retireable. They depend on the labor force for support.

Labor Force numbers 65 million or 41% of population. Women constitute 28% of total.

Roughly 50% of the population are housewives and students who are largely dependent on the labor force.



Source: Department of Commerce, Bureau of the Census

It Means a Big Shift in the

The chart above is based on the most optimistic of the Census Bureau's predictions for 1975. It shows a population growth of almost 70-million for the 25-year period. It shows, too, that the primarily dependent groups—over 65 and under 15—will grow faster than the worker group.

The implications of these shifts have been hashed and rehashed countless times. The trends themselves have been accepted almost without question. Economists have interpreted the figures (BW—Aug. 29 '53, p. 28) in terms of growing demand for labor, rising wage rates, a booming market for labor-saving devices, increasing pressure toward

mechanization, a great influx into colleges, a marked rise in demand for goods and services for those under 20, an increased pension load on the economy.

Almost before the predictions were made, they started to be upset.

• **Birthrate**—Demographers—population experts—had anticipated wide swings in the birthrate during the forecast period. The first five years or so—from 1950 to 1955—should have been on the low side. They haven't been. National Office of Vital Statistics estimates that 4,021,000 babies were born last year. That's an all-time record—in fact, the fourth record-breaking year in a row.

By all that's logical, last year should have been a poor year—babywise. It was the year when the low birthrates of the Depression (30% to 40% below those of the 1940s) caught up with us. There's no denying that fewer girls reached marriageable age and had their first babies last year. And statistics show that there were fewer marriages in 1954 (1,476,000) than in 1953 (1,533,000). Yet more babies were born. Some experts see 1954 as a freak year; others see it as bolstering a postwar trend.

• **Labor Dislocation**—Many forecasters felt that the rise of automation in manufacturing in the early 1950s would

ditions expected by 1975

2 4 6 8 10 Millions

This forecast of a two-thirds gain in the old age group is conservative. Due to improved nutrition and medical care, people are clearly living longer.

This forecast is no guess — all these people have already been born. The pinch in numbers reflects low birthrate of the depression years; next lower levels show the coming of age of war babies. Question: How many of these will go into the labor force?

This forecast is open to the greatest controversy. The actual birthrate will depend on such unpredictable things as the age at which people will marry, the size of families they want, and marriage rates.

2 4 6 8 10 Millions

©BUSINESS WEEK

Economy by 1975

cause a serious displacement of labor. The slack would have to be taken up by booming markets for travel, homes, and other nonmanufacturing goods and services. The decrease of workers in mining and agriculture with the advance of mechanization was viewed as handwriting on the wall.

But it hasn't worked this way. Manufacturing's share of the workers is still on the way up. From a low of 17% in 1935, the percentage has risen steadily to about 25% today, an all-time high. And the increase appears primarily in the areas where automatic equipment is being introduced most rapidly.

The combination of a high plateau in the birthrate and increasing employment in manufacturing has forced the economists into a new round of predictions.

I. It All Ties In

What economists do is take the Census Bureau projections and relate them to the dollar aspects of the economy. Both the demographers and the economists are human, however, and they make errors.

In the 1930s, for example, the demographers figured they were the one group among social scientists who

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"... major trend in American population today is toward homogeneity..."

POPULATION starts on p. 186

really knew what they were doing. They took pride in the accuracy of their projections. Yet they misread the Depression decline in population as a tapering off in population; they predicted that, by the year 2000, we would reach stability such as France has known for some time. Of course, they were wrong, and they now project continued growth through the rest of the century (BW—Apr. 30 '55, p. 158).

• **U.S. Census**—For all its errors in projection, the U.S. Census is still the most comprehensive and carefully prepared of all economic statistics. Demography is one field of research in which America has blazed the trail. Established by the Constitution and first operated in 1790, our program has set the standards for the world. The 1950 edition of the Census cost about \$60-million and temporarily employed some 160,000 persons.

Between 10-year censuses, and every month since 1940, the Census Bureau has been checking a scientifically selected sample of 25,000 households. This provides up-to-date data on labor force, employment, unemployment.

• **Interpretation**—Using this same basic data, some economists predict mass unemployment in the next couple of decades; others see a labor shortage. It may be that both are right, depending on exactly what area and time is being discussed.

Growth in population is directly tied to growth in the output of goods and services that's known as gross national product. Economic expansion is a primary requirement for high employment, high real incomes. And, more than any other single factor, economic expansion is dependent on technological advances.

Technology increases productivity, raises earning power, and lowers prices. It hastens development of new products, expands the market for new plant and machinery.

The basic population questions thus become (1) exactly how large will this market be and (2) exactly how many workers will there be in the labor force of an expanding economy? You can get some clues to the answers by looking at the trends that demographic researchers have uncovered.

II. How Much Growth?

Three factors affect the growth of population: immigration, deathrate, and birthrate.

Until World War I, immigration played a significant part in the growth of the population of this country. At times it accounted for almost half the annual growth. But since the 1920s it has been stringently held down. The post-World War II peak was 200,000 in 1950. The figures are not expected to rise much above that level in the foreseeable future, and immigration will probably account for less than 10% of annual increases.

• **Deaths**—Deathrate is the factor that puts America above most of the rest of the world. It has been dropping here at a great speed from about 17.2 per 1,000 in 1900 to 9.6 per 1,000 in 1950. The decline is largely due to our rising standard of living, particularly medical care. Any further advances will serve mostly to increase the number of infants and older dependents. Deathrates are still high in the primarily dependent group. Among workers, from say 15 to 45, death even from accidents is a minor factor. In other countries a high deathrate at all ages more than balances their higher birthrates, so the United States is growing faster than practically any other country in the world.

• **Births**—Birthrate is becoming the most important factor in our growth, and it's the factor most subject to change. From 1915 until about 1935, the birthrate declined from about 25 per 1,000 to about 18 per 1,000. Then it began to rise. It hit a peak of 26.6 in 1947 and has held up on a high plateau with 25.3 last year.

Along with the rise in birthrate there has been a sharp decline in infant mortality. In 1900 there were 162 deaths per 1,000 children under one year of age, compared with 28.1 in 1954.

• **Denominator More Common**—The three factors of immigration, deathrate, and birthrate do not operate in a vacuum. They are very closely related. Probably the most significant trend in the American population today is toward greater homogeneity.

The great differences in vital statistics that once existed between wealthy and poor, foreign-born and native-born, are pretty much things of the past. North or South, rural or urban, the statistics tell a remarkably similar story. There are still differences, but the gaps are closing fast.

• **More Swing**—On the face of it, increasing homogeneity among the population would seem to simplify the demographer's task. It would appear to get rid of all the little dips and bumps in the forecast curve.

Just the opposite is true. Minority groups used to act as a brake on trends. Nowadays, if a sudden trend develops, practically everyone is involved. There can be great unchecked swings.

Such shifts will show up most clearly



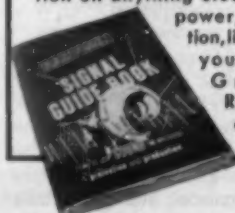
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"... everyone who will be in the labor force in 1970 has already been born..."

POPULATION starts on p. 186

in the birthrate. As literacy and the economic stake increase, birth is coming under control in all segments of the population. Having a baby, and especially having more than one child, is largely a question of economics.

- **The Economics**—Young parents now have fewer economic worries than their parents. The ideal family size today seems to have settled at three youngsters. Before the war it was two. For a while after the war it got up to four.

Demographers have to base predictions about size of families not only on the dips and spurts of the economy that are foreseen but also on an even more chancy proposition: the attitude of young couples toward those dips and spurts. If a couple sees good times ahead, they may have another child; if not, they won't. It would appear that young marrieds were not very worried about last year's dip in the economy. Demographers have been trying to detect a corresponding dip in births. So far they haven't found it.

- **Variables**—A physical scientist would say that the trouble with forecasting the birthrate is that there are too many variables. Here are some of the trends that demographers must consider:

- **More women are having babies.** Only 10% of couples are childless today, in contrast to 15.9% in 1940. This trend is partly attributable to the government because of the more favorable draft and tax status given couples with children. Higher incomes also mean that more people can "afford" children.

- **The married proportion of the adult population is increasing.** If statistics are adjusted for changing age distribution, the percentage of single adults (over 14) has decreased from 36.7% in 1890 to 28.4% in 1954. The married percentage has increased from 57.9% to 66.7%; divorced, from 0.2% to 1.8%. The most significant increase in the proportion of married people came during the 1940s.

- **Families remain small** (3.59 persons per family in 1954, as contrasted with 3.54 in 1950; 3.76 in 1940). Not only are there fewer children; there are fewer doubled-up families. Maiden aunts and grandparents maintain their own homes these days, largely because houses are smaller. The great influx into the suburbs means that more people are maintaining separate homes. However, last year, the number of new homes built exceeded the number of families formed. This is a

situation that may limit the building boom.

- **The level of education is rising** so that most youngsters now complete high school. About the same percentage go on to college today as attended high school after World War I. The experts have been expecting a drop in college enrollment when the backlog of GIs was worked off, but the drop hasn't come. Last year a greater percentage of high school graduates went on to college than ever before.

- **People are getting married** younger than they did a generation or so ago. Again this is partly attributable to the government. Wartime and pre-draft marriages pulled down the average age. This means that young wives have more years of potential childbearing ahead of them than their mothers did. If times stay good, it could mean a trend toward bigger families. But this trend is bumping against the education trend. It's difficult to marry younger and go to college, too.

- **Last year's marriage rate of 9.2 per 1,000 population was the lowest since 1933.** This reflects the low birthrate of the depression years. Other factors remaining the same, the number of marriages should skyrocket during the 1960s, when the war babies reach marriageable age.

All of these trends suggest that we can count on the most optimistic of the Census Bureau's population estimates, unless, of course, we are hit by a recession much more severe than last year's. Economists are a lot less certain about the size and productivity of our labor force.

III. How Many Workers?

Everyone who will be in the labor force in 1965 and 1970 has already been born. And the great majority of those who'll be working in 1975 have also been born.

At present the labor force, including 3.2-million people in the armed forces, totals 67.8-million workers. Of the civilians, 61.7-million are employed, 2.9-million are unemployed. (BW—May 14 '55, p17).

But the labor force is an extremely flexible aggregation. It expands and contracts with demand. If times are bad and a family needs more income or if a national emergency creates more jobs, housewives go to work, oldsters come out of retirement, youngsters take part-time jobs or postpone their education until after the crisis.

- **Potential Force**—The potential labor force is much larger than the actual labor force. Census Bureau includes everyone between the ages of 14 and 65. The people in this category now total about 102-million. Thus, the



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"... the pinch in the 20-30 bracket will last another five years ..."

POPULATION starts on p. 186

actual labor force now includes about 41% of the total population and about 66% of the potential labor force.

To maintain the 41% average that has held for the last few decades, we would need close to 90-million workers in 1975. This 90-million would also come out very close to 66% of the 135-million potential labor force predicted in the most optimistic Census projections for 1975.

• **Complications**—However, there are a number of complications:

Hard Core: The heart of the labor force consists of men between the ages of 17 and 65. Starting in 1950, the younger portion of this hard core began to shrink. Again as a result of the low birthrate of the 1930s, fewer men were moving into the potential labor force than were moving out.

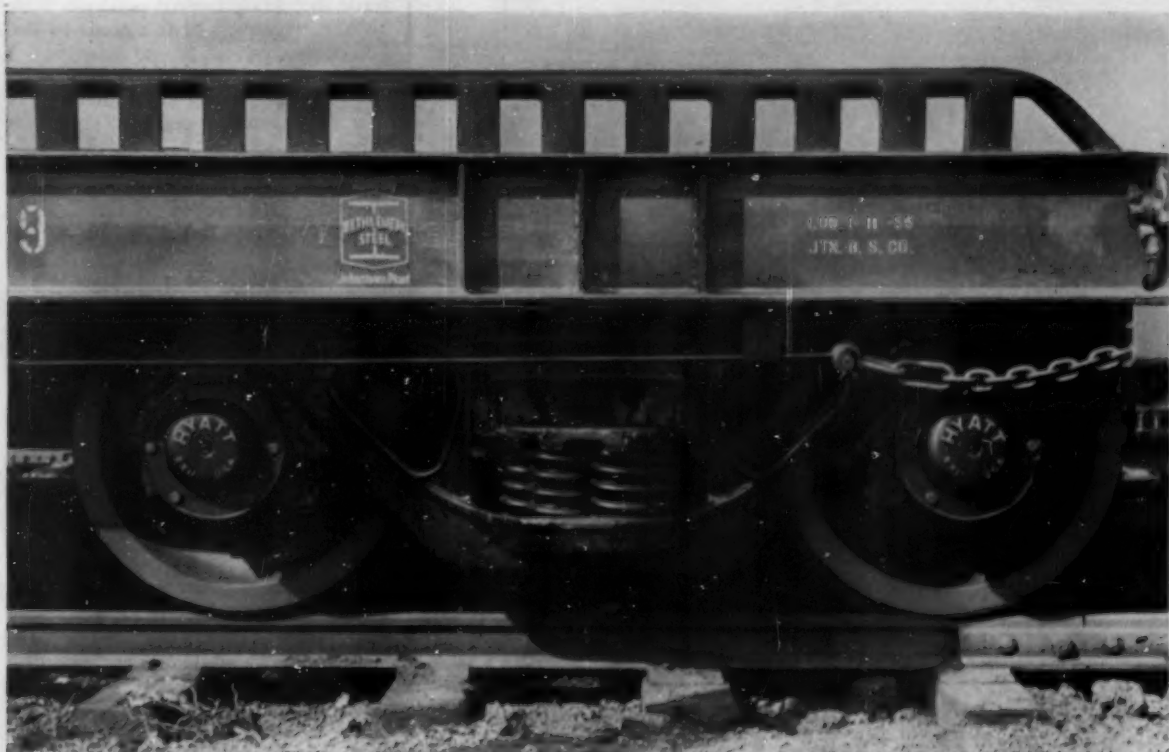
The pinch is now in the 20 to 30 bracket and will remain there for another five years or so before moving upward. To counteract this shortage, a million or so additional women, older men, or younger men will have to enter the labor force.

But by 1965, the arrival of the war babies in the lower bracket will more than compensate for the pinch in older workers.

Women. Female employment fluctuates much more widely than male. In 1920, women constituted 21% of actual workers. The percentage shot up during World War II, fell afterward, rose again during Korea. It's now at an all-time high of 31% and is expected to go up to 33% during the shortage.

The shift, however, is even more pronounced than the figures indicate. With more younger women busy having babies, the increases will have to come mostly from the over-45 group who have already raised their families. Advances in medicine have helped to keep these older women capable of doing many jobs their mothers couldn't have handled.

Retireds. One of the fastest-growing segments of the population is the over-65 group. Many of these people are not only capable of continuing work but are eager to do so. In the event of a labor shortage, some of these would undoubtedly go back to work. However, due to a marked discrepancy in deathrates between men and women, an increasing percentage of the over-65 group is female. Women outlive men by about seven years. So this group by itself will probably con-



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tinue to contain more dependents than workers, regardless of the needs of the labor force.

Teen-Agers. The youthfulness of some members of the labor force comes as a shock to many people. The 1950 Census found that 10% of all Americans between the ages of 14 and 15 were in the labor force. In 1910, about 31% of 14 and 15 year olds were "gainfully employed." The trend is clearly toward more education and later entry into the labor force, but there are still a great many high school and college students with part-time jobs who qualify as members of the labor force.

City Slickers. The U.S. population is now largely urban. One out of every 10 city dwellers in the world is an American, though we have only about 6% of the total population. In 1900, about 60% of the population was rural—which meant farm. Today the farm population is less than 15%.

Today, too, urban means very largely suburban. The great influx has been into the suburbs, where a more mobile population can drive fairly long distances to work. The spread into the suburbs has stimulated the building business and all industries serving leisure-time activities.

• **Effect on Output**—Most controversy arises when you try to relate these labor force groups to output. Basically there are four considerations:

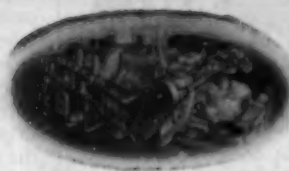
• **Work week.** It's pretty certain that the work week will shrink. The average is now 41 hours in manufacturing. It may drop to 35 hours by 1975 or perhaps even by 1970.

• **Actual workers.** The military will probably continue to claim a share of the labor force, and there is always a percentage of the labor force unemployed during job changes and seasonal letups. The actual civilian labor force may be as much as 10% less than the projected 90-million total labor force in 1975.

• **GNP.** Estimates call for a growth of 38% in gross national product by 1965 and anywhere from 70% to 100% by 1975. The lower goal should be easily attainable, since gross national product has been growing at a rate of 3% a year since the 1930s. With continuing technological improvement, there's no reason for the rate to drop.

• **Productivity.** Average work week multiplied by average hours worked and divided into gross national product gives a measure of productivity or output per man-hour. McGraw-Hill's Dept. of Economics makes these estimates of output per man-hour in private GNP (excluding government): \$2.53 for 1950, \$3.34 for 1960, \$4.15 by 1970. Using similar conservative projections, the figure for 1975 would be around \$4.30.

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Charting Savings at Sea

Washington weather experts move from a cluttered basement to a full-time office, preparing their new sea navigation system for bigger things.

Washington's energetic young radio-TV weather forecaster, Louis Allen, this week shifted a unique business operation from the cluttered basement of his house to a suite in a downtown office building. Into the moving vans went a bank of teletype machines, filing cases jammed with weather charts, and piles of heavy volumes of weather records. Once in his new business headquarters, Allen set up anew his contacts with shipping companies and with ships' captains sailing the Atlantic and the Pacific.

For Allen, and for the eight other maritime and meteorological experts who make up Louis Allen Associates, the move from the cramped and cluttered basement was fair evidence that their enterprise was on the way to bigger things.

What the group has come up with is a new concept of routing vessels across the ocean. In 18 months, the concept has been applied to the long-distance ocean runs of about a dozen ships. And it has saved each ship an average of 29 hours on each run—plus savings of thousands of dollars for the shipping companies.

What Louis Allen and his group see for the future of their idea is the chance that it will become a money-making enterprise bringing savings of up to \$3-million a month—in fuel, salaries, and insurance—for the entire U.S. merchant fleet.

• **How It Works**—Basically, Allen's idea is an effort to apply to ships the well-tried principles that aircraft navigators use to calculate optimum flight paths—principles that allow aircraft to skip past storms, ride high-speed high-altitude winds, and reach their destinations well in advance of the time they'd arrive if they followed old marine navigation theories.

But, because aircraft make ocean crossings in hours against the 10 or 12 days that a ship may take, Allen's methods necessarily are more complex.

The sea routes that he suggests to shipping companies and ships' captains are based on two things:

- Current and historical weather conditions along the route of the voyage.
- Application of each ship's characteristics to the type of weather it must face.

By using the first formula he gets his navigation method away from stereotyped charts of historical weather aver-

ages. Allen stresses that since the average is always the mid-point between varying conditions it's not a reliable forecast for any particular date.

In working out the second factor he considers the speed, draft, stability, type of cargo and its loading, and any other unusual bit of information about the ship. Lightly loaded ships, riding high in the water, are more subject to winds, less subject to ocean currents and swell. Heavily loaded ships, riding low in the water, are more subject to the condition of the sea than to winds. Allen plots the routings accordingly.

• **How It Differs**—For generations, ships' captains generally have followed those sea routings that historical weather patterns showed to be least disturbed by seasonal storms. Day-to-day forecasts permit them some chance to vary their courses. On these routings, ships often have one or two days that are better than average. But ships using Allen's suggested routes have found weather over the entire voyage better than conditions they would have met along the old routes.

This is just what happened when the 10,000-ton U.S. Maritime Service freighter Enid Victory followed one of Allen's suggested routings. It sailed early last January from La Pallice, France, and an identical ship sailed the same day from Liverpool, England. Both ships were 3,318 nautical miles out of New York, and both were similarly loaded.

Just before sailing time, Allen's office radioed a suggested Atlantic crossing route to the master of the Enid Victory. Through the voyage, no further word was sent to the ship, but if a sharp change had come in the weather, Allen would have sent the captain an alternate route.

• **First Past the Post**—The Enid Victory sailed into New York Harbor 67 hours ahead of the vessel that left Liverpool on the same day. The reason: The Liverpool ship followed the historical route, swinging south to avoid a normally stormy area off Newfoundland. The Enid Victory followed Allen's course, based on his prediction that, since the Newfoundland storm center had moved south temporarily, the Enid Victory could run through the shorter northern route before the storm returned.

Records show that the Enid Victory, with a sailing time 2½ days shorter than the Liverpool ship, saved about \$700

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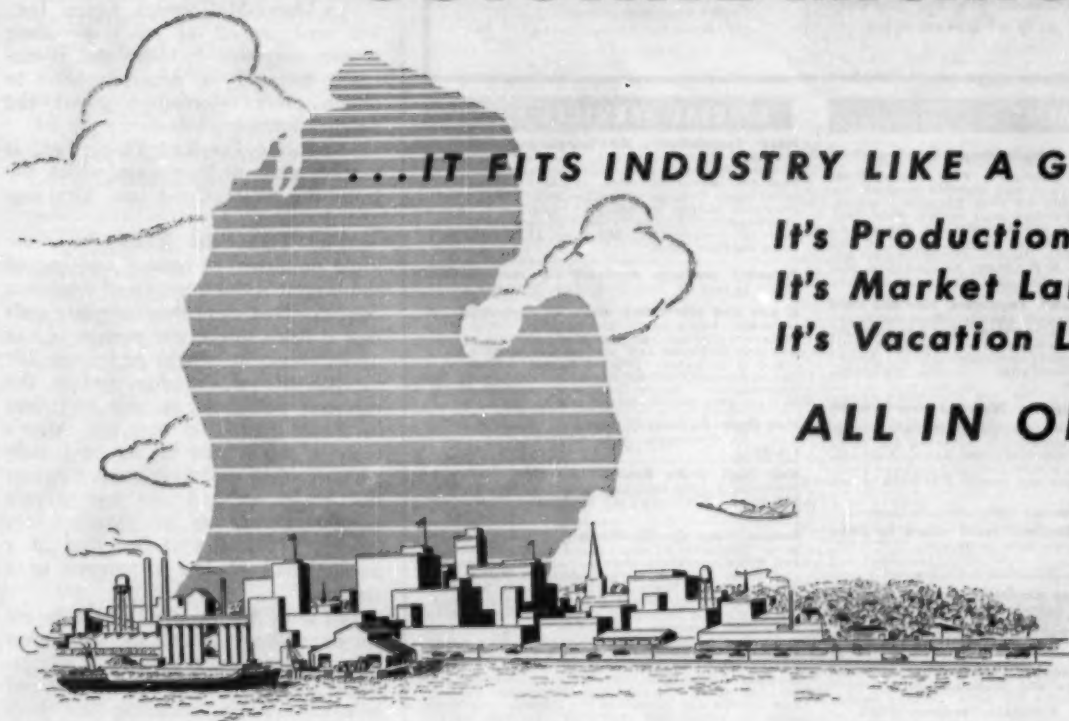
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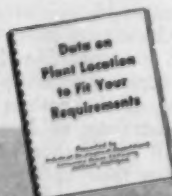
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in fuel and \$5,500 in operating costs, aside from further savings in insurance, personnel, ship repairs, and cargo damage.

The result of the test was enough for the Maritime Service to write Allen a check for \$6,000 (the main part of the savings made in the Enid Victory's crossing) and retain him for further tests.

Others are pleased with the way Allen is speeding their ships. Among them are:

- Moore-McCormack Lines, Inc., has sent several of its ships along courses suggested by Allen and is currently engaged in demonstrations to obtain more information about the new sea routing method.

- Pacific Far East Lines, Inc., is putting some of its vessels, which ply from the West Coast, on Allen-suggested routes.

- Who Takes the Risk?—There are some problems, of course, and one of the biggest is the question of insurance liability. One steamship company feels that if Allen directs the passage of one of its ships, he would be responsible for the fate of the ship, and so the company would not be able to collect insurance if the ship were lost. Allen's reply to this is that his service is only advisory, that the ship's master retains full command and can use Allen's suggestions just as he pleases. Says Allen: "My service is like that of a navigational aid—like a compass or a sextant."

Just now, Allen's ideas for the future are focused on making his downtown office a center for his brand of navigational aid. But in the back of his mind he's considering extending his work into other fields—setting up an industrial weather center where he would sell forecasts to public utilities.

He's a graduate meteorologist and has spent years at his work. Prewar, he worked for Pennsylvania Central Air Lines (now Capital Airlines, Inc.) and through World War II he was an oceanographer with Adm. Chester Nimitz's Pacific headquarters. After the war he headed the program branch at the Navy's Hydrographic Office, in Washington.

- Top Man on TV—For more than three years now he's held one of the top listener ratings in Washington, through his nightly appearances on WTOP-TV, where he chats about the weather forecasts and their likely effects on flowers and vacation trips. He gives just about all his remaining time each day to his ocean navigation service. And this, too, is the pattern for the other eight members of Louis Allen Associates. All have other permanent jobs. But once their enterprise really gets on its feet they probably will resign their present positions.

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Meeting at the Summit

Pres. Eisenhower's decision approving a Big Four conference was not an easy one to make. The idea of a meeting at the summit has never entranced Eisenhower or Dulles as it has Churchill. Ever since Sir Winston first broached the subject, shortly after Stalin's death, the Administration's view has been cool and cautious.

In refusing to be rushed into a meeting, the President has reflected the feelings of most Americans. The nation as a whole has a strong antipathy to a top-level conference with the Communists. This is based on the bitter experience of previous meetings, which have made us feel that a new approach would not only be futile but might actually expose us to great dangers.

This antipathy has not faded away now that the idea is to become a reality. We feel sure that the President has not lost his distrust of the Communists. But increasing pressure from our friends and allies abroad, and from such responsible figures as Sen. George at home, has led him to take the risks.

The pressure from abroad is not a sudden desire to appease the Communists. It arises primarily through fear of an H-bomb war, a fear much more intense than we seem to realize. It may well be that this fear of nuclear annihilation is also dominant among the voiceless Russian masses. In making peaceable gestures, the Communist hierarchy is attempting to win propaganda victories in the West; but it may also be seeking to appease its own people's overwhelming desire for peace.

By approving the meeting at the summit, we are showing our willingness to make peace. In the present state of world tension, we could not afford to do otherwise. We have always taken the position that our acceptance depended on a Russian sign of good faith, and now that they have agreed to an Austrian peace treaty, we have to assert our leadership. Our major task, in the weeks prior to the actual meeting, is to minimize the risks by exploring the entire situation with our allies.

The theme of peace is far too crucial to be composed extemporaneously and played by ear. However confident the nation may feel about the President, it does not want another performance like Roosevelt's at Yalta, or even like Wilson's at Versailles.

This danger is, happily, small. Eisenhower, by temperament and desire, is not the kind of leader who will attempt to improvise and make deals off the top of his head. He is a staff man who depends on staff work, and he has indicated that his job is to try to clarify the areas of contention and leave actual negotiations to Secy. Dulles and his counterparts.

These facts should reassure those who have been uneasy about a meeting with the Communists. The public, we think, can give its support to the President in good

conscience. Whatever the outcome of the conference, it will not be a failure for us if we are well prepared.

The Spread of Dynamism

Not infrequently in discussing the guaranteed annual wage, people speak of Detroit's dynamism—and the profound benefits it radiates throughout the U. S. economy. Whenever the point is raised, it goes something like this: The automobile business is dynamic. It is so dynamic that it forces its supplier industries—large and small—to step up their activity, to increase their capital spending, to boost their efficiency.

If this argument has seemed a little vague and theoretical, it need be thought so no longer. Consider last week's news out of the steel business.

Last fall, steel figured on spending about \$805-million on plant and equipment in 1955, down 3% from 1954.

Last week, the 1955 spending plans of the top producers alone totted up to \$1.1-billion. And there's some indication that this figure will rise (BW—May 7 '55, p25). While they haven't yet really started expanding their steelmaking capacity, industry leaders now discuss that subject frankly. They indicate it's not far away, even though it's only 16 months since they reached the 125-million-ton mark—which they figured would let them relax for five years or so.

To understand so striking a change, you don't have to psychoanalyze the steelmasters. You need only look at Detroit and its dynamism.

For example, Detroit had been taking about 20% of steel's annual output. This year, it has been taking more, probably 25%.

Nor did Detroit's impact end there. Autos sewed up so much of steel's flat-rolled capacity for so many months that other users scrambled to get on the order books. That raised steel's operating rate further and faster than even its optimists had foreseen. With steel and autos doing so well—and with a noble assist from home building—business indexes accelerated their rise. Businessmen everywhere suddenly realized that the inventory levels they achieved last fall were too low.

As buying multiplied, steel found its own inventory too low in at least one respect—that of capacity to make hot- and cold-rolled sheets. This was pretty startling, for in 1953 and 1954 the industry had spent heavily for new flat mills. Even so, today it's installing at least nine more.

So, if you want to define that great intangible—Detroit dynamism—just look toward Pittsburgh. Much of the latter's astonishing resurgence in capital spending is a direct byproduct of Detroit's insistence that there's nothing wrong with the U.S. auto market that about 7.2-million cars in 1955 won't cure.



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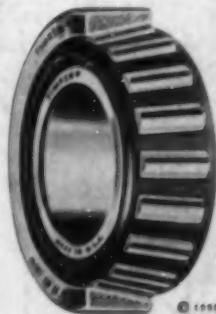
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